Perceptions of Public Opinion and Representation in American Politics

by

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Dedication

This dissertation is dedicated to the memory of Mark A. Miller and of William Evans.

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Abstract

In the American system of representative government, the public's preferences influence public policy through a mediated process in which elected representatives respond to their constituents' preferences primarily because of the threat of electoral sanction. One often-overlooked part of this process of representation is the role of how politicians perceive public opinion among their constituents. Because of limitations of their information environment and psychological biases in processing that information, politicians may not perceive their constituents' opinions accurately, with profound consequences for representation. Working with a team of collaborators, I have conducted a series of surveys of political elites and additional analyses that provide new insight into how politicians understand and perceive their constituents. In this dissertation, I investigate politicians' perceptions of public opinion. Drawing on original evidence from surveys of thousands of candidates running for state legislature, county party leaders, and ordinary citizens, my collaborators and I show that misperceptions of public opinion are rampant in American politics. We also show that, among elites, these misperceptions are asymmetrically biased — on average, Republican politicians believe the public is much more supportive of conservative policies than it actually is. Democrats do not show a similar bias, failing to overestimate support for their own policies. In additional analyses, I show that state legislative candidates' information sources may leave them particularly susceptible to misperceptions of public opinion, and I consider how asymmetries in citizen participation contribute to the asymmetric misperceptions we found among candidates running for office in 2012 and 2014. I also present evidence that ordinary citizens also overestimate the conservatism of citizens. In sum, the project provides unique evidence that misperceptions of what the public believes are an important force in American politics.

Chapter 1

Introduction

In April 2013, the U.S. Senate took up the Manchin-Toomey gun control bill, which would have required background checks on firearm sales at gun shows and over the Internet. In the aftermath of the school shooting at Sandy Hook Elementary in Newtown, Conn., tightening gun restrictions, especially closing the so-called “gun show loophole" that allowed people to buy firearms at gun shows with no background checks, was very popular among the public. In a CBS News poll conducted that month, 88 percent of respondents favored background checks for all gun buyers, a total that included 86 percent of Republicans and 95 percent of Democrats. Such widespread agreement among the public seems almost unbelievable in an era of mass and elite partisan polarization, but it was clear that tightening gun control laws in this small way was broadly popular among the American public.

Despite the overwhelming popularity of the bill, almost all Republican senators voted against it, except Pat Toomey (Pa.), Mark Kirk (Ill.), Susan Collins (Maine) and John McCain (Ariz.). Four Democrats also voted against the bill—Heidi Heitkamp (N.D.), Max Baucus (Mont.), Mark Begich (Alaska) and Mark Pryor (Ark.).[1] The bill’s defeat was seen as a major win for pro-gun forces such as the National Rifle Association. Why would so many senators vote against a large national opinion majority on a salient issue? Why would these Democrats buck party pressures *and* public opinion to vote against a bill that commanded support from large opinion majorities in every state?

[1]Majority Leader Harry Reid (D-Nevada) also voted against the bill as a procedural move so that he could bring it up again.

Many activists express frustration when they believe that public opinion is on their side of a political issue but they lose legislative battles. Such outcomes are not uncommon. In recent years, large majorities have supported gun control laws, reforms to the nation's immigration policies, and employment nondiscrimination policies to protect lesbian, gay and bisexual people. On all of these issues, Congress and many states have failed to respond to public opinion with legislation.

Political observers and activists often argue that such outcomes mean that the political system has been captured by special interests. These arguments often underlie calls for campaign finance reform and other efforts to connect legislative outcomes more closely to the mass public's preferences. Many of these criticisms of American government suppose that politicians willfully disregard the preferences of the majority—they know they are working against the will of the public, but they think they can get away with it. According to some people who hold this view, American democracy is broken, and only structural reforms can push politicians back to following the will of the majority. Implicit in these critiques is the notion that politicians know that the public wants a different outcome, but they willfully spurn public opinion and implement counter-majoritarian policies.

However, these outcomes are also consistent with another possibility—politicians simply might not know what the public believes. They might lack reliable information about public opinion and thus have to rely on subjective impressions that are prone to bias. At first glance, this theory may seem at odds with many assumptions about how politicians behave. Politicians have strong incentives to pay attention to the public, who can vote them out of office or make them look foolish by protesting their actions. Most observers characterize politicians as risk-averse and concerned with re-election, attributes that should make them pay close attention to their constituents' preferences.

Even though politicians have incentives to learn their constituents' preferences on important issues, it is reasonable that politicians might not always accurately perceive what their constituents believe. Their information about public opinion may be incomplete or biased, making the "electorate in their heads" look very different from the real population. Information is especially

limited for state and local politicians. In the absence of reliable or complete information about their constituents' preferences, they might rely on heuristics to form impressions. They might sincerely try to respond to a perceived constituency, despite the fact that it might not reflect reality. If the politicians have systematically false beliefs about their constituents' preferences, they might behave in ways that make them look biased, even though they are actually trying to represent the district fairly.

Politicians are not immune to the psychological biases that affect how humans process information. These biases can be especially strong when the information may challenge our preferences or self-image. However, scholars rarely acknowledge that politicians are subject to the same limits of attention and memory as all people are. When these cognitive limitations collide with the responsibility to make consequential decisions on policy, biases can emerge. Perceptions of constituents are likely to be colored by politicians' own attitudes and incentives.

I focus on the possibility that misperceptions of public opinion are common and consequential for representation. By investigating what politicians and the public believe about public opinion on major issues of contemporary politics, I uncover important evidence about how information and perceptions interact in contemporary American politics. I find that candidates for state-level offices and local party leaders have systematic patterns of misperceptions that affect both parties. These misperceptions persist across a variety of issues. Allowing for politicians to have false beliefs about public opinion means that we need to make significant changes to prominent models of how public preferences are translated into public policy.

Political analysts and scholars tend to take one of two approaches to evaluating how information about the public's preferences influences legislators. Usually, they simply ignore the fact that politicians might imperfectly perceive public opinion. This leads analysts often to make one of two equally implausible assumptions—either politicians know everything about their constituents' opinions, or they don't care at all. A long tradition of theoretical models assumes that politicians have complete information about voters' preferences (Downs 1957), largely ignoring the possibility that representatives may imperfectly perceive constituents' opinions.

Other scholars acknowledge that politicians' relationships to the public might be biased. These arguments usually do not engage in a meaningful way with the ways in which politicians process information about public opinion. Instead, they usually find correlations between opinions among certain subsets of the population, like the wealthy, and political outcomes (Bartels 2010; Gilens 2012). Sometimes they compare summary measures of the public's and elites' ideologies and find gaps between the two (Bafumi and Herron 2010; Fiorina and Abrams 2012). However, the mechanisms for groups to have unequal influence are rarely identified. Scholars have rarely considered whether this unequal influence operates through the mechanism of influencing politicians' perceptions of public opinion.

The answers to important questions about representation in American politics require getting information directly from politicians. We cannot simply guess how they perceive the world by observing their behavior in campaigns and in office. In this project, I address these questions using survey data collected directly from state and local-level American politicians, including many sitting officeholders.

For many years, getting access to a large sample of political elites to ask them about how they perceive public opinion was a challenge. At some levels of government, like the US Congress, it is almost prohibitively difficult to get access to officeholders. Politicians are extremely risk-averse and want to protect themselves from saying anything that might make them look bad or be used against them in an electoral campaign. However, advances in mass communication have facilitated access to political elites in ways that allow scholars to survey more populations of political elites than ever before. Many elites, especially at the state and local levels, are willing to answer confidential questions with a remarkable degree of candor.

I use original surveys of elites and the mass public to investigate what people believe about public opinion in the contemporary United States. I find that politicians and the public alike generally have inaccurate perceptions of public opinion on the most salient issues in contemporary American politics. Moreover, these misperceptions are not just inaccurate—perceptions of public opinion are also consistently biased. On almost every issue I test, politicians and the public

overestimate support for the conservative side of the issue. Both Democrats and Republicans overestimate public support for conservative positions.

I take these misperceptions of public opinion as a launching point to investigate several issues related to political representation. Using original survey data from thousands of American politicians and political elites, I consider how politicians learn about their constituents and how their psychological biases play into their perceptions. Using these insights, I recast our assumptions about representation in American government to reflect the reality of how politicians perceive their constituents.

In Chapter Two, I lay out a theory of how inaccurate or biased beliefs about public opinion can shape politicians' actions in campaigns and in office. I draw attention to common mistakes that scholars of representation might make if they assume that politicians have perfect or unbiased information about public opinion. I introduce the survey data that I use to evaluate how politicians perceive and relate to their constituents. These data come from two sources. The National Candidate Study is a survey of candidates running for state legislature. The National Survey of Party Leaders is a survey of the chairs and leadership of county-level political parties across the country. David Broockman, Nicholas Carnes, Melody Crowder-Meyer and I collaborated to conduct these surveys in 2012, 2013, 2014 and 2016. Both of these groups of political elites have an important role in shaping representation and political outcomes. These politicians and activists play essential roles in the building of the political parties, in structuring the candidate choices available to voters, and in policymaking. Working with a team of colleagues, I conducted surveys that tap these political actors' experiences, perceptions, and priorities.

In Chapter Three, coauthored with David E. Broockman, we review evidence that elites have biased perceptions of public opinion. Across a variety of prominent issues in contemporary politics, politicians running for state legislature tend to overstate the support for conservative policy positions among their constituents. This pattern is particularly pronounced among Republican politicians.

In Chapter Four, I draw on more evidence from the elite surveys, focusing on potential

mechanisms for these patterns of misperceptions. The results suggest that politicians' thinking about their constituents and their districts privileges conservative citizens and issue positions. I consider evidence about how politicians engage with their constituents and the activities they take part in during campaigns. I find that state legislative candidates engage in activities that are likely to bring them in contact with unrepresentative groups of their constituents, exacerbating biases induced by differential participation by citizens in the public sphere.

In Chapter Five, coauthored with David E. Broockman, Nicholas Carnes, and Melody Crowder-Meyer, I present evidence on one potential consequence of these patterns of misperceptions—asymmetries in the role of ideology in candidate recruitment. Using evidence from the survey of party leaders, I find that Republican party leaders strongly privilege ideological purity in their decisions of which candidates to recruit, preferring conservative candidates to moderates even when it may not be electorally optimal to do so. Democratic party leaders also care about ideology, but they prefer to encourage moderate candidates to run. These asymmetries in preferences for candidates track the party leaders' perceptions of public opinion in their states and counties.

In Chapter Six, I turn to the mass public. I explain why what ordinary citizens' believe about public opinion are consequential for mass political behavior. I present results from an original survey that show that members of the public tend to know very little about public opinion in their states. However, on average, their perceptions exhibit the same pattern of bias that elites' do — the public also overestimates the popularity of conservative positions. However, partisanship does not moderate beliefs as much for the public as it does for elites.

In Chapter Seven, I conclude. I summarize the findings and contributions of the dissertation project and highlight its limitations. I outline an agenda for future research that will continue to illuminate how perceptions of public opinion influence representation in American politics.

The project provides insights into why we see some political outcomes that seem not to reflect public preferences. Many politicians simply do not know what the public prefers on some of the most salient issues. The partisan-ideological asymmetries that I find can also help to explain some

of the features of contemporary American politics that are particularly vexing to scholars and activists, like the persistence of asymmetric polarization. In future work, I will investigate the conditions that can lead to these patterns of asymmetric perceptions of public opinion further, as well as investigate ways to improve the correspondence between politicians' perceptions and the public's true beliefs.

Chapter 2

Understanding Politicians' Perceptions of Public Opinion

How well do political outcomes in the United States represent public opinion? Many scholars and pundits are concerned with the correspondence between political outcomes and public opinion. [1] This central question of to what extent public opinion controls the activities of legislators has animated the study of political representation for decades. Modern polling methods give us more insight than ever on the public's attitudes about a host of political issues, but debates over the extent to which public policy reflects the will of the people persist. Scholars and activists are keenly interested in the extent to which governance reflects the will of the people. Prominent normative and empirical debates also consider the extent to which the public has stable and coherent preferences that should be represented by elites or whether elites should (or do) use their best judgement and act in a "trustee" role rather than simply following constituents' preferences.

In many theories of representation, a central premise is that the public, through elections, controls the activities of its representatives and that representatives in turn respond to their constituents' preferences. However, the influence of public opinion on public policy is mediated through representative institutions. These institutions of government are designed to rely upon politicians' ability to perceive and adapt to the public's demands. This mediation of public opinion complicates simple notions of democratic governance. Achen and Bartels (2016) contrast actual governance to a "folk theory of democracy," a straw man theory in which the public perfectly monitors what politicians do in office and politicians perfectly adapt to the public's preferences.

[1] The development of this theory has benefited greatly from my collaboration with David E. Broockman, Melody Crowder-Meyer, and Nick Carnes. I thank Arthur Lupia for helpful feedback.

According to many theories, re-election-seeking politicians make great efforts to translate opinion into policy faithfully, as they feel powerful incentives to respond to public opinion in their constituencies. For example, Stimson, MacKuen and Erikson (1995) depict legislators as highly attuned to public opinion, "like an antelope in an open field, [cocking] their ears...keen to pick up the faintest signals." A rich empirical tradition comports with this view, painting an optimistic portrait of politicians' motivation and ability to accurately perceive and respond to public opinion (Bartels 1991; Brody and Page 1972). Others doubt that politicians pay much attention to public opinion among the citizenry as a whole (Bartels 2008; Hacker and Pierson 2011). By this account, politicians feel much more accountable to the wealthy, party leaders, interest groups, or their own views than to rank and file voters' preferences (Bawn, Cohen, Karol, Masket, Noel and Zaller 2012; DeCanio 2005, 2006; Gilens 2012; Page, Bartels and Seawright 2013; Rogers 2014*a*,*b*).

Other perspectives on representation have taken a more optimistic but nuanced view of the relationship between public opinion and policy outcomes. Stimson, MacKuen and Erikson (1995) use aggregate measures to argue that elites are responsive to general public ideology and sentiment. They operationalize public opinion as a measure of liberal mood, and they find that policy is responsive to changes in this aggregated measure of mood. However, this research does not clearly state a mechanism by which politicians would perceive changes in mood. Wlezien (1995) and Soroka and Wlezien (2010) examine issue-specific responsiveness in specific spending areas such as defense and social welfare in several advanced democracies. They find strong evidence that spending and public opinion are related in a "thermostatic" way, as increases in spending in a domain result in decreased public support for spending, and vice versa. This domain-specific analysis provides important evidence of the form of the linkages between policy and public opinion. In my dissertation studies, I provide an even more detailed approach, examining perceptions of public attitudes toward fairly specific policy proposals. This approach arises out of the Cooperative Congressional Election Study's strategy of asking citizens for their opinions on actual or likely congressional roll call votes. These questions facilitate joint scaling of members of Congress and of the public. They also allow us to carefully examine how politicians

perceive public opinion on the specific choices they may have to make.

A key piece is missing from some of these theories and empirical studies. Many of them assume implicitly that politicians accurately perceive public opinion, either among the whole constituency or among certain groups. When scholars measure both public opinion and politicians' actions and compare the two, they are making an implicit assumption that politicians accurately perceive public opinion. Researchers measure public opinion among constituents or subconstituencies, then compare it to what legislators do. But how do we know that legislators accurately perceive public opinion? The assumption that they do should not be automatic. Classic theories of representation argue that politicians' information environments can leave them with biased perceptions of their constituents' opinions: "the constituency that a representative reacts to is the constituency that he or she sees" (Fenno 1977, p. 883) but "The Representative knows his constituents mostly from dealing with people who do write letters [and] who will attend meetings" (Miller and Stokes 1963, see also Butler and Dynes (2016); Miler (2010)). In this project, I clarify the debate over representation by studying how politicians form their perceptions of their constituents' opinion and how accurate those perceptions are. I then identify conditions under which we should expect to see various patterns of perceptions of public opinion among politicians.

To introduce this analysis, I first present a theory of the role of perceptions of public opinion in representation, the factors than influence politicians' perceptions of public opinion, and expectations about what politicians will believe about their constituents' opinions. I describe three possible patterns of politicians' perceptions of public opinion. Each pattern reflects the consequences of a different set of conditions that might exist in politicians' information environment—which constituents they meet and listen to. Each one also has different implications for how politicians represent their districts and how voters are able to control politicians' decisions. In the rest of the project, I test what state- and local-level politicians and party leaders actually believe about public opinion and find that they have asymmetrically biased perceptions of public opinion. I then consider a number of possible explanations for these patterns of perceptions.

PERCEPTIONS OF PUBLIC OPINION AND REPRESENTATION

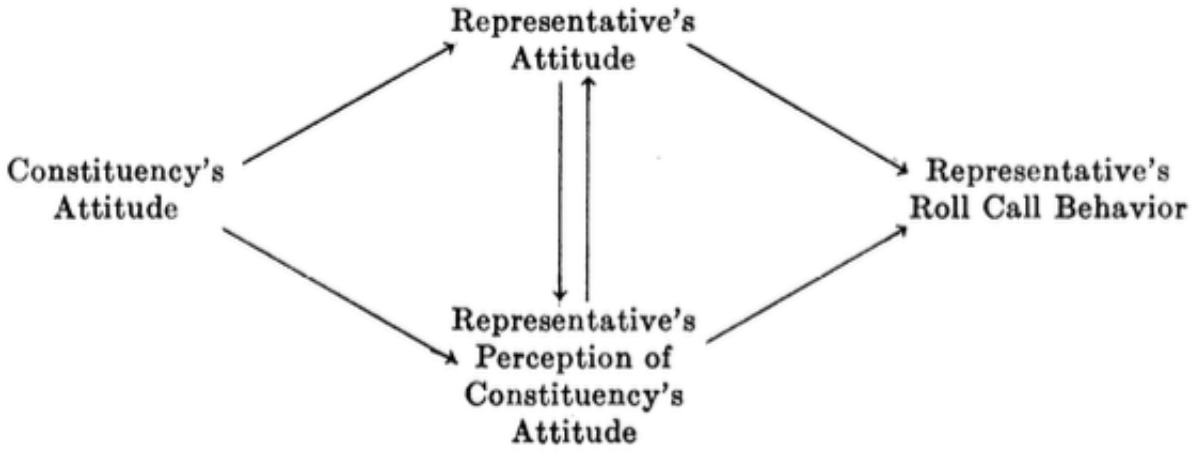
Many political scientists have acknowledged and investigated the ways politicians perceive public opinion, but for such an essential part of the process of representation, it has received considerably less attention than other topics. Miller and Stokes (1963) propose a famous model of representation, represented by a “diamond" that relates public opinion, politicians’ own opinions, politicians’ perceptions of opinion, and roll call votes. In this model, public opinion can take two paths to influencing policy. Through *electoral selection*, the public can choose representatives whose own positions are congruent with theirs. Through *perceptual control*, electorates can exert control of representatives through the politicians’ perceptions of their opinions, which Miller and Stokes acknowledge are likely to be shaped by the politician’s own preferences and biases. This model of legislators’ decision-making became highly influential in subsequent political science research.

For a period in the 1960s and 1970s, political scientists paid considerable attention to politicians’ perceptions of public opinion. Miller and Stokes’s (1963) seminal study was followed by a handful of other studies that directly investigated politicians’ perceptions of public opinion (e.g., Kuklinski and Elling 1977; Uslaner and Weber 1979; Hedlund and Friesema 1972). However, investigations of politicians’ perceptions of public opinion largely faded from political science research after the 1980s. Since Miller and Stokes (1963), scholars have recognized that politicians’ perceptions of public opinion must play a crucial role in generating responsiveness to public opinion, to the extent that such responsiveness exists (e.g., Grose 2014; Kingdon 1967; Jacobs and Shapiro 2000; Kousser, Lewis and Masket 2007). Yet, despite the central role of politicians’ perceptions in theories of democratic policymaking, we know remarkably little about what politicians believe about their constituents’ opinions and how they form these perceptions.

The most definitive study on the subject remains Miller and Stokes’s (1963) study of Members of Congress’ perceptions of public opinion in 1958. However, this landmark study left open significant questions and had significant shortcomings. First, as Achen (1977, 1978) showed, Miller and Stokes’s (1963) measure, the correlation coefficient, was flawed statistically and

theoretically, leaving their findings ambiguous. Second, as Weissberg (1978) noted, collective representation might be robust even if individual legislators tend to have flawed views of their particular constituencies, raising questions about its limits. Finally, with public opinion polls now widely available (Herbst 1993), and as politics has become more sorted along partisan lines (Koger, Masket and Noel 2009; Nall 2014), one may well expect to find different results today than in 1958. Thus, with Miller and Stokes's (1963) data collected nearly sixty years ago, our understanding of this central mechanism linking public opinion and public policy rests on surprisingly shaky ground. The reason is quite simple—collecting data on political elites' perceptions of public opinion requires access to cooperative elites. Instead, many scholars have focused on evidence from roll call votes and other publicly available sources to evaluate how closely politicians' actions follow public opinion.

Figure 2.1: Miller and Stokes (1963) model of the relationship between public opinion and legislative outcomes.



Prominent models of elite decision-making thus emphasize the role of legislators' attempts to carefully monitor voters' preferences in generating congruence (e.g., Miller and Stokes 1963; Kingdon 1967; Fenno 1978; Arnold 1990). But do representatives perceive their constituents' views accurately enough to adapt to them well? Miller and Stokes's (1963) classic work concluded otherwise, finding that "the conditions of influence that presuppose effective communication between [Representative] and district" are not "well met" – after pairing a pioneering survey

of political elites with data on mass opinion from the American National Election Studies, they concluded that representatives typically have "very imperfect information about the issue preferences of [their] constituenc[ies]."

Yet, despite Miller and Stokes's (1963) sizable and still-growing influence, it remains unclear whether one should accept their central empirical claim that politicians largely fail to accurately perceive their constituents' opinions. Achen (1977, 1978) showed that Miller and Stokes's (1963) standard for measuring accuracy – the correlation coefficient – had important flaws; Weissberg (1978) noted that Miller and Stokes's (1963) pessimistic findings about dyadic representation might belie robust collective or aggregate representation. In short, politicians might be inaccurate about public opinion, but if their errors were symmetric, they might cancel each other out. There is also little available data that would allow us to re-examine their conclusions. Small elite and mass sample sizes in Miller and Stokes (1963) make it difficult to re-evaluate their findings in light of the critiques by Achen (1977, 1978) and Weissberg (1978), in addition to raising further questions about the validity of their original estimates (e.g., Clausen 1977). Scholars also largely ceased producing new work in this area decades ago (Jewell 1983), with only rare attempts to appraise elites' perceptions having been made since, and nearly always in contexts beyond the United States (Belchior 2012; Converse and Pierce 1986; Holmberg 1989; Norris and Lovendusky 2004). Other scholars in the 1960s and 1970s did follow in Miller and Stokes's (1963) footsteps, yet none managed to overcome the issues their critics identified, as most of this work was completed before the critics had articulated the deficiencies in Miller and Stokes's (1963) methods (see, e.g., McCrone and Kuklinski 1979; Kuklinski and Elling 1977; Brand 1969; Uslaner and Weber 1979; Erikson, Luttbeg and Holloway 1975; Hedlund and Friesema 1972). In addition to facing the same challenges as Miller and Stokes (1963), these studies reached conflicting results. McCrone and Kuklinski (1979), for example, described the accuracy of elites' perceptions of their constituents as "reasonable" while Brand (1969) judged it "scandalously low."

In recent years, several scholars have also carried on the Miller and Stokes (1963) tradition by investigating how constituent communication might shape politicians' perceptions (e.g., Bergan

2009; Bergan and Cole 2015; Miler 2007, 2009), a significant and important question, albeit a distinct one. Especially given the strong scholarly interest in potential sources of unequal influence in representation, it seems essential to investigate how politicians' perceptions of their constituents are shaped by the world around them.

WHY POLITICIANS MIGHT MISPERCEIVE PUBLIC OPINION

Understanding how politicians perceive their constituents' opinions requires paying attention to how politicians relate to and learn about their districts. Political scientists have come to different conclusions about how politicians prioritize being in touch with their constituents' opinions. In one view, politicians are highly attuned to their constituents' preferences and priorities. Considerable evidence shows that politicians expend costly effort to be visible in their districts and to at least give the impression that they are connecting with voters (Fenno 1978; Grimmer 2013).

Another prominent view holds that politicians pay attention only to narrow subsets of their constituents. In this view, politicians might only expend effort to learn about and respond to the opinions of their copartisans (Kastellec, Lax and Phillips 2010), wealthy citizens (Bartels 2010; Gilens 2012), people of certain racial/ethnic groups (Whitby 2000), or people who are likely to vote. Such an approach might be strategic for some politicians. For example, a member of Congress running in a district that heavily favors his or her party may face stronger challenges in the primary election than in the general election, and such a member might feel added incentives to respond to party activists. Such intra-party pressures, real or anticipated, might be responsible for a large part of the increasingly asymmetric polarization in national politics (Hacker and Pierson 2005).

A strategic politician should not knowingly spurn the median voter or a large opinion majority. Some people argue that politicians only pursue their own preferences, ignoring their constituents when they disagree. Others argue that politicians are beholden to the preferences of donors, interest groups, and lobbyists. Many scholars have found empirical support for these kinds of arguments. However, these theories fail to account for the fact that most politicians have strong incentives not

to deviate from the public's preferences. If the public is paying attention to legislators' actions on controversial issues, legislators may be punished for taking counter-majoritarian action (Nyhan, McGhee, Sides, Masket and Greene 2012).

This accountability mechanism is imperfect in practice. In most cases, voters only have the choice between two candidates, both of whom may have majority support for their positions on different issues. It is well known, too, that citizens pay limited attention to the workings of government (Delli Carpini and Keeter 1996; Lupia 2015). For these reasons, politicians may feel that they have some leeway when it comes to following public opinion. It follows that a politician with time and attention constraints might also not think much about public opinion on issues that he sees as unlikely to affect people's votes. But how much effort should we expect politicians to expend to learn about public opinion?

Key (1961) articulates a simple theory of how politicians anticipate public opinion when they make decisions.

> "To know how the public will respond to a contemplated course of action, those in positions of leadership and authority need only to relate that action to their estimate of the pictures in people's heads and adjust their strategy accordingly." (Key 1961, 264)

In arguing that politicians perceive a national mood, Stimson, MacKuen and Erikson (1995) write,

> "Turnover from elections works most transparently with politicians who are neither well informed (until hit on the head by the club of election results) nor strategic. But that does not look at all like the politicians we observe. The oft-painted picture of members of Congress, for example, as people who read five or six daily newspapers, work 18-hour days, and leave no stone unturned in anticipating the electoral problems that might arise from policy choices does not suggest either limited information or naïveté." (Stimson, MacKuen and Erikson 1995, 544)

These quotations are typical of many classic theories of voter control of politicians. They demonstrate the centrality of perceptions in representatives' decision-making. Both rely on assumptions about politicians' ability and motivation to perceive public opinion that may not always be true in practice. Where does that estimate of the pictures in people's heads come from? Key's simple description of how legislators anticipate public opinion masks the complex process that is actually happening, and Stimson et al. do not consider how their theory might generalize to state-level politicians with fewer resources to commit to monitoring public opinion. The true process involves politicians' information sources, their personal psychological biases, and other factors than can influence decision-making.

Politicians' imperfect knowledge of public opinion could take several forms. Politicians might not know which side of an issue has majority support. Even if they do know the median voter's preference, they may know little about the relative size of opinion majorities on either side of an issue. They also might not know about the relationship between support for an issue and demographics or partisanship. Each of these gaps in knowledge could be consequential for different actions that politicians might take.

The ways in which legislators process information about their constituents' opinions and develop their perceptions of public opinion have been the subject of relatively little empirical scrutiny. I examine this issue in depth for two major reasons. First, politicians' perceptions of public opinion can be highly consequential for how they behave in office. In most models of legislative decision-making that include public opinion in the district, it is typical to assume that true public opinion, as measured by surveys, translates into legislative outcomes.

Legislators and party leaders at both the state and national levels of government have both real and perceived needs to be responsive to public opinion (Maestas 2000, 2003; Mann 1978; Mayhew 1974). Once legislators are elected, the mass public can only hold them accountable through the prospect of future electoral sanctions. Although mass attention to the details of lawmaking is limited, politicians have strong incentives to avoid taking positions that will put them at odds with a majority of their constituents, especially if the policy area is highly salient and likely to mobilize

opponents.

THEORETICAL PREDICTIONS FOR PERCEPTIONS OF PUBLIC OPINION

How do politicians form their perceptions of public opinion? How accurate should we expect them to be? These questions are crucial to understanding representation. The answers depend in large part about the assumptions that we make about how politicians collect, process and react to information about their constituents. Politicians are likely to have well-developed prior views about the political leanings of their districts. They typically have access to detailed information on past electoral returns and the partisan makeup of their district, but issue-specific opinion may not track well with these statistics. Two key inputs shape politicians' perceptions of their districts: *information* and *perceptual biases*. Politicians form their perceptions by combining information from a variety of sources. As they process this information, they are subject to a range of psychological biases that affect the accuracy of their perceptions. If these misperceptions become systematic, they could have important implications for the actions and positions politicians take.

To illustrate the role that information about public opinion and perceptions of public opinion play in shaping representation, I describe three potential patterns of perceptions and conditions that would be likely to produce them. Each has roots in different assumptions about politicians' ability to collect information, and each has different implications for the accountability mechanisms on which the democratic system relies. In later chapters, I test actual patterns of public opinion perception among state legislative candidates and party leaders. I also present new evidence on some of the informational and perceptual conditions that play a role in determining what politicians believe about their constituents' opinions.

The three potential patterns of opinion are *accurate perceptions*, *symmetrically biased perceptions*, and *asymmetrically biased perceptions*. The next section introduces each pattern of perceptions. I then identify conditions under which we should expect politicians' perceptions to fall into each of the patterns. Under different realistic conditions, we would expect the accuracy

and bias of politicians' perceptions of public opinion to vary considerably, with potential important consequences for how public opinion is translated into public policy.

Information sources and and perceptual biases

Under different combinations of informational and psychological conditions, politicians' perceptions of public opinion could fall into each of the three patterns. This section reviews some of the information sources and the psychological processes that influence how politicians perceive their districts. I identify a set of conditions under which politicians' perceptions of public opinion could fall into each of the three patterns. In Chapters 3 and 4, I present empirical evidence on some of these information sources and psychological processes.

Polls

Quality polls or surveys would undoubtedly be the most accurate way for politicians to develop their perceptions of their constituents' opinions. Over decades, the polling industry has grown, and new technologies have allowed for more frequent and numerous surveys. Nevertheless, as I show in Chapter 4, at the state legislative level, polling is rare. Even those candidates who do conduct polls are not always sure that they should trust the results, and they don't always ask questions that would give them a good sense of their constituents' preferences on specific issues. A politician who wants to know where her constituents stand on issues could get important information by polling them, but many state-level politicians lack the resources to do so.

Contact with and from constituents

Even if politicians don't scientifically poll their constituents, they still receive information about what their constituents believe from their activities that bring them in contact with people in their districts. Candidates meet constituents both because they seek them out, attending events and meetings and knocking on doors, and because constituents seek them out, calling their offices or scheduling meetings to express themselves. While the extent to which politicians engage in their districts and communities obviously varies, most spend considerable effort to be visible in their district by attending public events, meeting with community groups, and knocking on doors.

In Chapter 5, I report more details on how state legislative candidates say they spend their time in their districts. How candidates spend their time and who they meet provide opportunities for misperceptions of public opinion to develop. Depending on how candidates spend their time, these decisions about who to meet could lead to either symmetrically or asymmetrically biased perceptions.

Consider a candidate who spends a lot of time knocking on doors in her district. The candidate might start out her campaign knocking doors somewhat randomly, visiting different streets in different neighborhoods. If she kept up this sort of random contact, she might encounter a representative subset of her constituents. In the real world, though, a number of factors could make the candidate unlikely to encounter a representative group of constituents. Candidates might target their own copartisans in a get-out-the-vote strategy. In this case, a candidate, encountering many people who agree with her, might overestimate support for her own positions, leading to the *symmetric misperceptions* outcome. Modern campaign analytics tools (Hersh 2015) allow for these kinds of targeted campaigns. Some citizens might simply be easier to meet than others, because they live in more accessible places or are more engaged in the community. During the course of a campaign, a candidate in a small state legislative district might personally meet a sizable portion of their constituents. However, the candidate may meet an unrepresentative group of constituents, distorting her view of constituency opinion. If a candidate mostly meets people who agree with him or her, they may believe their position has more support than it actually does, leading to the *symmetric misperceptions* outcome. If citizens with a particular set of opinions are easier to access, candidates may find themselves in the *asymmetric misperceptions* outcome, overestimating support for one side of the issue.

Politicians don't always have a choice of which constituents they encounter. Some constituents will seek them out in order to express their positions on issues. Often, this contact will take place in the context of grassroots lobbying efforts conducted by interest groups (Kollman 1998). The rise of the internet and email has reduced the costs of organizing large grassroots campaigns, possibly at the cost of reducing their effectiveness in swaying legislators (Cluverius 2017). In surveys of

Congressional staffers conducted by the Congressional Management Foundation, staffers report that contact from constituents plays an important role in determining how congressional staffers view public opinion on the issues. Contact is most persuasive if it is in person and includes a level of policy detail. Several recent studies show that contact from constituents and other information shocks affect the positions legislators take (Bergan 2009; Bergan and Cole 2015; Butler and Nickerson 2011; Butler 2014; Henderson and Brooks 2016). These studies suggest that if one side of an issue is more vocal in contacting legislators or otherwise expressing itself, it could seem to have broader public support than it actually is. This condition would predict the *asymmetric misperceptions* outcome.

Perceptual biases

Projection and false consensus biases

Well-known psychological theories suggest that people dealing with imperfect or incomplete information might overestimate support for their own preferences or issue positions. Considerable evidence shows that people, when asked to make judgments about attributes of social groups, tend to overestimate the similarity of other group members to themselves. This is one of a broader set of “wishful thinking" biases. In a variety of settings, psychologists have found that people tend to overestimate the extent to which others are like them and share their views, sometimes called “projection" and “false consensus bias" (Fields and Schuman 1976; Krosnick 1990; Maner, Kenrick, Becker, Robertson, Hofer, Neuberg, Delton, Butner and Schaller 2005; Mullen, Dovidio, Johnson and Copper 1992; Ross, Greene and House 1977; Sherwood 1981). This pattern has been found for a variety of political and non-political issues and in evaluations of peers and of politicians. If politicians engage in a straightforward false consensus bias, we might expect them to symmetrically overestimate support for their own positions. These theories predict that politicians making estimates of public opinion under uncertainty would end up in the *symmetric misperceptions* outcome.

Heuristics

People use heuristics, or information shortcuts, to make many kinds of decisions. Politicians evaluating their constituents' opinions are no different and will use easily obtained information to stand in for information that is more difficult for them to acquire.

When estimating constituents' opinions on particular issues, politicians could rely on simpler heuristics that may be easier for them to process. Using a partisan heuristic, the politician might assume that the partisan makeup of their district correlates well with issue-specific opinions. In an era when people's opinions are increasingly sorted based on partisanship, such an approach might lead politicians to approximately accurate perceptions. However, if they misunderstand how partisanship maps onto issue-specific positions, their perceptions could be biased. Politicians might also assume that demographic factors give them insight into their constituents' opinions.

Heuristic-based perceptions could lead politicians' perceptions to fall into any of the three categories. If the heuristics that politicians use are valid, meaning they map well onto their constituents' actual opinions, heuristic-based reasoning is sufficient for achieving the *perfect accuracy* outcome. However, only slight biases in the heuristics that politicians use could lead them to other outcomes. Even if a politician knows how many union members are in his district, if he misperceives the share of union workers who support a policy, the heuristic will not help him accurately estimate policy-specific opinion. In Chapter 4, I show qualitative evidence that state legislative candidates often turn to these kinds of heuristics in estimating public opinion. However, heuristics could lead politicians to any of the three perceptual outcomes, depending on the relationship between the heuristic and true underlying public opinion.

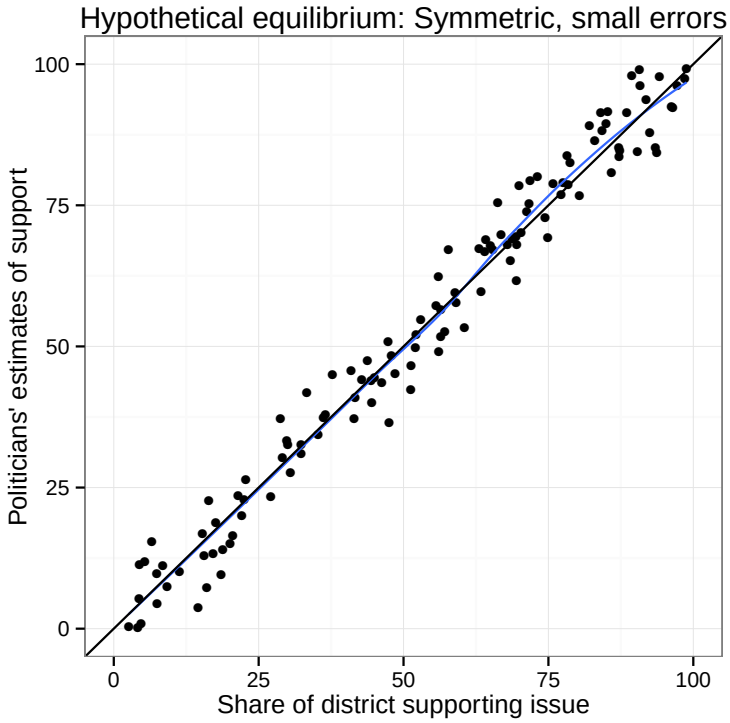
In the next section, I define the predicted pattens of perceptions more precisely.

The first case: perfect information, accurate perceptions

In the first potential pattern of perceptions of public opinion, politicians accurately perceive their constituents' opinions on issues. They may make some errors, but they are small and random. In the aggregate, these small errors cancel out. A graphical depiction of this kind of pattern is presented in Figure 2.2, which plots "true" public opinion in a set of hypothetical districts on the x-axis. The

y-axis represents politicians' perceptions of public opinion.

Figure 2.2: The "accurate perceptions" outcome



A hypothetical situation in which politicians can perceive issue-specific opinion in their constituency well, making only small, random errors. The x-axis represents "true" support for an issue position in a set of districts, while the y-axis represents politicians' perceptions of support for the issue.

Downs (1957) proposes a theory of representation that predicts that parties will converge to the preferences of the median voter. Key elements of Downs' theory include a one-dimensional issue space. The logic of the Downs model predicts that politicians have strong incentives to (1) accurately perceive the position of the median voter on salient issues and (2) move to that position. This logic predicts that (1) the candidate who knows where voters are is likely to win and (2) all candidates' perceptions should converge to the truth. Voters, on the other hand, have little incentive to expend costly effort to learn about politics. They only need to know which party is closer to their ideal point. This model has been highly influential in shaping scholars' approaches to studying representation. In many ways, it serves as a baseline to which other theories of representation are compared.

We might expect that some legislators aspire to behave this way, closely following constituent opinion. Theoretical and empirical findings strongly suggest that politicians are especially concerned with re-election (Mayhew 1974). A politician who is not re-elected will not be able to achieve his goals in the future. While some politicians little weight on their future goals, most who are eligible to run for re-election do so. It seems reasonable to predict that, if information about public opinion were costless, most candidates would gladly accept it and integrate it into their decision-making.

This logic underlies what Achen and Bartels (2016) call “the folk theory of democracy." Achen and Bartels note that many people believe that democracy works through the strict control of politicians by their constituents. They argue that, for a number of reasons, models of political accountability that rely on complete information are insufficient for explaining the real world. This pessimistic view is not new; Miller and Stokes (1963) expressed surprise at the low correlations between members of Congress' perceptions of public opinion and true opinion in their districts.

Unfortunately for politicians, information about public opinion is costly. They may aspire to learn all they can about their districts, but limited resources in terms of time, money, and polling capacity can all prevent them from collecting the kinds of reliable information that would allow them to make judgments about their district's preferences. A theory of responsiveness to the median voter might suggest that a pattern of perceptions like the one in Figure 2.2 will take hold, but are the assumptions behind it reasonable in practice? I argue in this project that, at least at the state and local level of government, they are surely not.

In sum, prominent theories of representative government predict that politicians will accurately perceive their constituents' opinions. But what if the assumption that politicians *can* do so is not met?

Imperfect information, symmetrically biased perceptions

What happens to prominent theories of representation if we relax the assumption that politicians can easily and accurately perceive public opinion? As Miller and Stokes (1963) pointed out, a

major pathway for public opinion to influence policymaking is through politicians' perceptions of constituency opinion. Models that suggest that politicians are responsive to actual public opinion are oversimplified because politicians usually cannot directly observe opinion. Instead, they are responsive to their perceptions of what their constituents think about issues.

Several attributes of politics make it unrealistic that politicians will have perfect information about their districts' preferences on every issue. To be sure, technological advances have greatly reduced the cost of a reliable public opinion poll. However, the sheer volume of legislative activity makes it unwieldy for politicians to poll their constituents on every issue they face. Many of the issues that legislators confront are quite complex, and on many of them, we would not expect the public to have well-developed preferences (Lupia 2015). The number of legislative districts in the United States also makes it unwieldy for parties or candidates to conduct representative polls in every district. Even quality state-level opinion polls remain relatively rare.

In the absence of an objective measure of public opinion, legislators must rely on more subjective impressions. They may infer what their constituents believe about specific issues from what they know and believe about the district's partisanship. Their subjective impressions are likely to be affected by the constituents with whom they have frequent contact. A joke holds "that Republicans could never understand why they lost an election because all their friends at the country club voted Republican"[2]. Politicians might misperceive public opinion because they are more likely to encounter citizens who agree with them. This unrepresentative group of citizens may shape the politicians' perceptions of the district as a whole.[3]

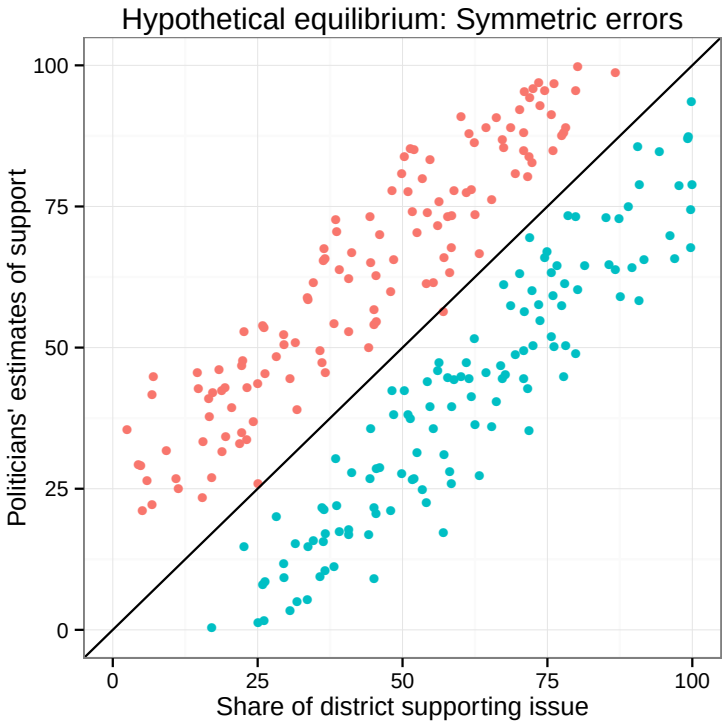
In an optimistic case, legislators' perceptions of public opinion might amount to a noisy approximation of the truth, with basically random errors. In the aggregate, such misperceptions should not substantially bias representation, as random errors would cancel out. Such a pattern might be likely if, for example, easily identifiable demographics correlate closely with people's opinions in a way that allowed politicians to map from district characteristics to majority opinion.

[2]Paraphrased at `http://www.politico.com/magazine/story/2015/07/moderate-republicans-donald-trump-tea-party-conservative-fringe-2016-120675`

[3]I investigate these processes further in Chapter 4.

However, there is also reason to believe that legislators' attempts to collect subjective information on district opinion might give them a biased view of where their constituents stand. The ways in which legislators connect to their districts are the subject of Fenno's (1978) classic work. Fenno shows that legislators attend to different subsets of their constituencies for different reasons. In particular, legislators and candidates are likely to encounter citizens whose views are close to their own. They must recruit campaign volunteers and donors, who usually come from a pool of people with similar ideologies and and policy preferences to the candidates. Many of them need to secure endorsements and support from party leaders. Many candidates also must run and and win a partisan primary, meaning they will spend a considerable amount of the election season focusing only on their copartisans, not on the district as a whole. Primaries also give politicians an electoral incentive to follow the median voter of their party, not just the district.

Figure 2.3: The "symmetric errors" outcome.



A possible pattern of perceptions of public opinion in which each side overestimates support for its positions, leading to symmetric misperceptions.

Figure 2.3 depicts a hypothetical situation in which politicians overestimate support for their own issue positions among their constituents. Politicians in both groups are overconfident about the level of support for their side of the issue, consistent with theories that predict false consensus bias. In one empirical example, Enos and Hersh (2015) find that Democratic campaign volunteers are over-optimistic about their candidate's likelihood of winning. Politicians, in the absence of reliable information about public opinion, could believe that more people agree with them than actually do.

Biased information, asymmetrically biased perceptions

One key condition of the symmetric errors pattern is that politicians of both parties believe that their own positions are more popular than they are. This pattern is consistent with many findings about how people form perceptions with limited information. We might predict that politicians are similar to most people and are subject to these biases in information processing, which would lead to the symmetric errors equilibrium. This outcome could arise either because politicians collect information about their districts in a way that is biased toward their own point of view.

However, the political information environment is rarely perfectly symmetric. Often, one side advocates for itself in a way that disproportionately reflects its actual support in the public. If one side of an issue mobilizes more than another, politicians may receive communication that does not accurately reflect the underlying distribution of opinion. Many commentators have pointed to this pattern as a feature of the contemporary debate over gun control. Although gun control policies consistently command majority support in most states, politicians from both parties remain hesitant to enact them. Some people argue that this is because pro-gun citizens are better organized and hold their position more intensely than anti-gun activists (Goss 2008).

In this third possible pattern, politicians do not make symmetric errors. Instead, their perceptions of the public skew in one direction. This pattern is depicted in Figure 2.4, which shows a relationship between true public opinion and politicians' perceptions that is biased in one direction. In the version I have depicted, the red party supports the issue, but the blue party

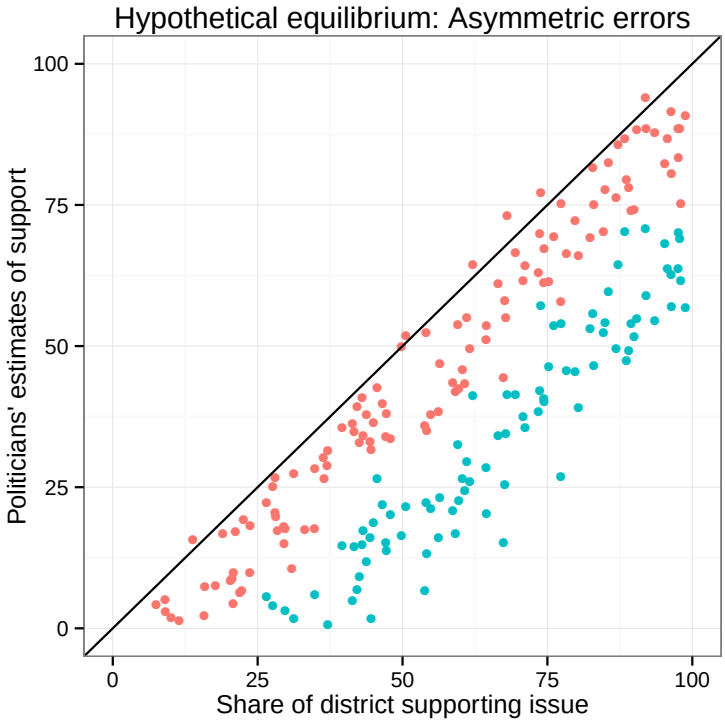
does not. However, aspects of the information environment drive politicians of both parties to overestimate opposition to the policy. Because of motivated reasoning and wishful thinking biases, the politicians assume, in the absence of information to the contrary, that the public supports their preferred positions.

Asymmetries in perceptions of public opinion could arise from the many documented partisan-ideological asymmetries in American politics. In Chapter 4, I consider asymmetries in citizen activism that might explain why politicians would overestimate the conservatism of their constituents. Grossmann and Hopkins (2015*a*) identify a variety of asymmetries in the way the two major parties are organized in the electorate and at the elite level. They argue that the Republican party coalition is organized most strongly around ideological commitments, while the Democratic coalition is a loosely aligned set of group-based interests. They document a variety of ways in which the two parties are fundamentally different, both at the elite and the mass levels. In addition to these asymmetries, the parties have polarized asymmetrically (McCarty, Poole and Rosenthal 2006), with Republicans growing more extreme at the elite level than Democrats. In short, considerable partisan-ideological asymmetries exist in American politics that could contribute to an information environment that is biased toward suggesting that one side of an issue is more popular than it actually is.

Table 2.1: Conditions predicted to be associated with each of the three patterns of perceptions of public opinion.

Accurate perceptions	Symmetric bias	Asymmetric bias
Accurate and frequent polls	Few or no polls	Few or no polls
Contact with a representative group of constituents	Contact with mostly own partisans	More contact with one side
	False consensus	Asymmetric false consensus
All citizens contact equally	All citizens contact equally	One side contacts more

Figure 2.4: The “asymmetric misperceptions" outcome.



A possible pattern of perceptions of public opinion in which one side dominates the information environment, leading to asymmetric misperceptions.

DATA: ELITE SURVEYS

To evaluate these questions of how politicians perceive their constituents, we need direct data from politicians themselves. In this section, I introduce the original surveys of American political elites I have collected with David E. Broockman, Nicholas Carnes, and Melody Crowder-Meyer.

Politicians create many publicly observable traces of their activities. They sponsor legislation, cast roll call votes, send newsletters to constituents, make speeches, air television and radio ads, and give media interviews and press conferences. From this trail of evidence, observers can reconstruct a rich picture of how politicians present themselves to voters and the media (Grimmer, Messing and Westwood 2012). Politicians’ public activities and statements can provide important insights into their ideologies and other aspects of their representational styles.

Although we can sometimes easily observe what politicians do and say, much of the important activity in politics happens behind closed doors, out of the view of both the public and researchers. When politicians make strategic choices to introduce certain legislation at certain times, when they meet with interest groups and informal advisors to help set their priorities, and when they meet with donors, no one can observe what they say. Many people point to these behind-the-scenes activities as a possible pathway for corruption, or at least as possible ways that representatives could become out of touch with their constituents. Whatever their intentions, politicians' private actions play a central role in shaping important political outcomes.

In addition to what politicians *do*, what they *think* shapes important political outcomes. Perceptions of public opinion are one such area in which it's impossible to learn what politicians think without asking them directly. This can be a difficult task. Sitting and even retired officeholders are often reticent to consent to surveys or interviews. Politicians are not always willing to talk honestly with researchers about their activities and perceptions.

Working with a team of colleagues, I have collected thousands of survey responses from political elites across the country. By focusing on candidates for state legislature and local party leaders, we have identified a group of politicians who make consequential decisions but are still relatively willing to participate in academic surveys. In the studies that follow, I use data from these surveys of American political elites. We gather information on what politicians do and think that isn't obvious from their publicly observable activities. Our main approach is to ask politicians and political elites directly in surveys about their beliefs and activities. I also rely on survey experiments to uncover politicians' motivations, beliefs, and prejudices. By providing politicians a strong promise of confidentiality, I hope they will provide insight into some of the behind-the-scenes aspects of their representational styles and their campaigns. By surveying candidates during the height of the campaign season, I connect with them at one of the times they will be most engaged in their districts.

ELITE SURVEYS IN POLITICAL SCIENCE

Many political scientists have conducted original data collection through interviews or surveys with political elites. These studies have had a variety of goals. Among the most common are studies evaluating similarities and differences between elites' and the public's ideologies and political sophistication.

In one of the most prominent and groundbreaking studies of representation, Miller and Stokes (1963) paired an American National Election Studies survey of the mass public with a survey of sitting members of Congress. A number of subsequent studies used surveys of various elite populations to evaluate representation (e.g., Kuklinski and Elling 1977; Uslaner and Weber 1979; Hedlund and Friesema 1972), but surveys of officeholders largely faded from the agenda in political science research.

Surveys of convention delegates have also been common in political science research. The conventions provide a convenient way to access many activists and elites at one time and place. One major project, the Convention Delegate Study, surveyed delegates to the major party conventions during most election years between 1972 and 2000. Insights from this study have been used in a number of studies to characterize the beliefs, activities, and attributes of party activists (Carmines and Woods 2002; Jennings 1992; Stone and Abramowitz 1983). Convention delegates provide a useful sample of highly engaged and politically sophisticated activists.

For several decades, systematic studies of elites became less common in political science research. While some scholars used interviews with small numbers of elites in their research, few turned to large-scale surveys of elites. However, interest in studying politicians through direct interaction has grown in recent years. Daniel M. Butler has conducted a series of survey experiments and audit studies on municipal officials and on state legislators (Butler 2014). Enos and Hersh (2015) used a survey of campaign volunteers embedded in the Democratic party's data tools to identify how activists evaluate the closeness of the races they are working on. This ingenious design shows the potential for using new technologies to access political elites more

often and more easily.

We can learn much from studying partisan activists. They provide important insights into how engaged citizens view the issues animating politics at any given moment. We can gain insight into how influential people are likely to attempt to move public opinion. Activists are also easier to access and sample than officeholders—they are more numerous and not subject to the pressures of political office. Despite the highly influential nature of some of this research, these direct survey-based studies of politicians and other elites remain somewhat rare. Researchers need to convince political elites to take time from their busy schedules to respond to surveys, and achieving large enough samples to make valid statistical inferences can be difficult. To address these concerns, my team and I turned to the state level and specifically to state legislative candidates, a large and diverse group of politicians. Our surveys focus on these state-level politicians, as well as party leaders. Our main population of interest is candidates running for state legislative offices.

Many political scientists focus their research on the federal government,. Data about the activities of federal officeholders is relatively easy to access, and almost everyone agrees that the actions of Congress and the federal government are very consequential. At the same time, politicians at the state and local level make many consequential decisions. State legislatures pass laws that have the same force as federal laws, but members of state legislatures face unique informational and resource constraints that are relevant for the development of their perceptions of public opinion. Despite the fact that these politicians have important lawmaking responsibilities, they work with much more limited resources than members of Congress do.

Typically, state legislators, even in states with professionalized legislatures, have little access to reliable polling data on their districts. In the 2014 National Candidate Study, I asked candidates about their campaigns' use of polling. A large majority of candidates in the survey reported that their campaign would not use any polls at all. Many state legislators also have minimal electoral competition. The exact figure varies across years and states, but in some years more than half of incumbents do not have a challenger (Rogers 2014*a*). The population of people running for state legislature clearly varies in important ways, ranging from long-time incumbents and future

members of Congress to political amateurs. In sum, the population of state legislative candidates has several attractive features. It is possible to access a large enough number of respondents that meaningful statistical inferences can be drawn.

THE NATIONAL CANDIDATE STUDY

David E. Broockman, Nicholas Carnes, Melody Crowder-Meyer and I collaborated to conduct a large-scale study of candidates running for office in 2012 and 2014. We call our survey the National Candidate Study (NCS).

The 2014 National Candidate Study

The National Candidate Study was an original survey of candidates who ran for state legislature in 2014, including many sitting legislators running for re-election. The NCS was a combined online and mail survey fielded in October 2014. To build the sampling frame, we obtained contact information for as many candidates for state legislature as possible from Project Vote Smart, which maintains a comprehensive database of candidates for office nationwide.[4] 1,803 candidates responded[5] for an overall response rate of 20.8%. At least 793 of the respondents won their general election and served in state legislatures.

Importantly, the NCS was designed to minimize the chance of staff responding to the survey instead of candidates. The online version of the survey had a screener question that shut down the survey if the respondent did not report personally being a candidate. Also, where multiple email or

[4]We collected mailing addresses and email addresses for each candidate from Vote Smart, restricting our sample to major party candidates. Many candidates had both forms of contact information available and almost all had at least one form. Of the 8,965 candidates listed as running, 8,858 candidates had a mailing address available and 4,775 candidates had an email address available. In early October, all candidates for whom we had a mailing address on file received a postcard announcing the survey. Candidates with email addresses on file then received three email invitations over the course of about three weeks. In mid-October, all candidates with mailing addresses on file who had not already taken the online version of the survey received a paper copy of the survey that they had the opportunity to mail back to us. The paper copy of the survey also included a code that allowed candidates to go online to take the survey if they had missed our email invitation or we did not have an email address on file for them.

[5]1,175 candidates responded to the email solicitation, 84 responded online after receiving the mail version, and 610 candidates returned the paper version of the survey, for a total sample size of 1,803 candidates

mailing addresses were available in the Project Vote Smart database, we chose the ones most likely to be the candidate's home address or personal email as opposed to campaign office addresses.

More information on the design and representativeness of the 2014 NCS is in Chapter 3 and its appendix.

The 2012 National Candidate Study

Most of the analysis in this project relies on the 2014 NCS, but I also draw on items from the first year of the NCS, conducted during the 2012 election. The design of the surveys in the two years was nearly identical.

In early August 2012 we gathered data on contact information for every candidate for state legislative office. Many legislators only had email addresses, many more had only physical street addresses, and the preponderance of candidates had both. We attempted to gather contact information for all 10,131 state legislative candidates though were unable to gather contact information for 306 (3%). This left a total of 9,825 in the sampling frame. In mid-August we sent three waves of email solicitations to all 7,444 candidates for whom we had e-mail addresses. After 1,318 responses from this email solicitation, we then attempted to secure cooperation in a mail version of the survey among a randomly selected[6] 5,000 candidates who had not yet responded. These candidates were sent a postcard informing them that the survey would be arriving in the mail, followed by a paper version of the survey one week later. An additional 589 candidates returned this paper survey.

Two aspects of the sampling frame are worthy of special comment. First, our sampling frame includes both sitting legislators and candidates for office. Second, it includes legislators from states across the spectrum of professionalism, including highly professionalized legislature and part-time legislatures where individual legislators represent only very small constituencies.

1,907 candidates responded to the 2012 NCS in total, for a response rate of 19.5%. There is no

[6]We conducted blocked sampling on state and incumbency, retaining the probability that each individual candidate was selected but ensuring greater balance in the resulting sample on these variables.

meaningful relationship between response rate and party of the candidate, whether the candidate won or lost, or the candidates' margin of victory. About half the sample won their November general elections, and about half the sample comes from each party.

A follow-up online-only survey conducted in mid-November yielded 514 responses among the 1,907 respondents to the first wave of the study. The post-election survey was conducted among all candidates who responded to the pre-election survey and had an email address on file.

More information on the design and representativeness of the 2012 NCS is in Chapter 3 and its appendix.

THE 2013 NATIONAL SURVEY OF PARTY LEADERS

In 2013, Broockman, Carnes, Crowder-Meyer and I conducted a survey of the leaders of county political parties. We call our survey the National Survey of Party Leaders (NSPL). In most states, county party organizations make up an important part of the parties' structure. Typically, each county's branch of the political party is active in recruiting and endorsing candidates. The NSPL was designed to give insights into the ways that parties are structured and how party leaders make strategic decisions when they recruit candidates and set the priorities of their local parties.

The structure of parties varies somewhat by states, but in the vast majority of states, each county has a distinct party organization. The extent to which these county parties are closely aligned with the state party also varies, as do their procedures for selecting leadership. Moreover, the distribution of county populations is extremely skewed. Most counties are very low in population and rural, while a handful of urban counties contain a large proportion of the US population.

In November 2013, we fielded the NSPL, a survey of the chairs of the roughly 6,000 county-level (or equivalent) branches of the Republican and Democratic parties. We began by collecting party chairs' email and/or physical mailing addresses from publicly available sources, usually state party organizations.[7] Much like the NCS, we sent postcards and pre-survey emails

[7]Some states do not have county parties but instead have parties at the parish (LA), borough (AK), district (ND), city (CT), multi-county (MN), or sub-city (MA Democrats) level. In 9 states, neither party posts contact information

to each respondent (if we had both a mailing address and an email address, we sent both), then followed up a week later with a full letter and/or email inviting the chair to complete the survey.

To administer the survey, we first manually compiled contact information for 6,219 county party chairs. We gathered this information by searching the internet for the name of every county in the US together with the name of each of the two major parties. In some states, we found directories. In many states, we made inquiries to individual parties to gather contact information for each chair where it was missing. We chose county-level parties as the sampling frame for several reasons. First, they and their local equivalents are often the most active organizations in primary elections at the state and federal levels (Crowder-Meyer 2011). They also recruit a large share of candidates for local and state office and, in turn, many of the candidates who later run for higher offices (Crowder-Meyer 2013; Lawless 2012). Consistent with their importance in primary elections, over 78% of the party chairs in our sample indicated that people in their county party organization have helped support a particular candidate in an open primary. In a separate survey of candidates for state legislative office, we also found over 57% indicated that people in their local party organization were important in encouraging them to run for office. In November 2013, we sent each chair a pre-notification and then a survey invitation at his or her email and/or postal addresses. (If both were available, we attempted contact at both.) We received responses from 1,118 (18%), a response rate comparable to the NCS.

More information on the design and representativeness of the NSPL is in Chapter 5 and its appendix.

Representativeness and limitations of survey studies

Survey studies have important limitations. Unlike some observational studies, where administrative records or other comprehensive data sources allow researchers to collect data on entire populations of interest, surveys rely on assumptions that the group of respondents who complete the survey are representative of the broader population being studied. Differential response rates are a serious

for county-level party officials online: Georgia, Indiana, Iowa, Kentucky, Michigan, New Hampshire, New Mexico, Oklahoma, and Wisconsin. We excluded those states from our analysis.

concern for survey research and have the potential to introduce bias into analyses based on surveys (Groves 2006; Groves and Peytcheva 2008). A number of approaches to mitigate total survey error exist, but none can overcome the limitation that surveys rely on a sample of the population of interest that is subject to respondents' decisions to participate. Some of these concerns can be particularly severe for opt-in online panels such as the CCES, on which my analysis of public opinion relies. Our elite surveys have some advantages compared to typical surveys of the mass public. For a survey of the public, researchers are only able to contact a subset of the potentially eligible citizens; they then typically only secure cooperation from a small percentage of the public. In our surveys, we attempt to recruit the entire population of major-party state legislative candidates and county party chairs. We cannot secure cooperation from more than 80% of these populations, so our results should be seen as representative only of those elites who responded.

Weighting is one way to address potential bias, but it is far from a panacea. Weighting can only correct for differences in responsiveness that are attributable to observed variables (typically measurable demographics such as age, race, gender, education, and geographic location). If *unobserved* variables affect response rates, weighting will not account for the biases. Rather than construct a weighting scheme for the elite data, I rely on split-sample approaches, subsetting the data based on observables that I hypothesize may correlate with my outcomes of interest, such as incumbency, party, and professionalization. Still, this approach cannot account for all possible sources of bias in the surveys.

PROJECT SUMMARY

How do politicians perceive their constituents' opinions, and what are the consequences for representation? In the rest of this project, I explore this topic using a variety of strategies and original data. Some of the project draws on coauthored research that I have conducted with David Broockman, Nicholas Carnes, and Melody Crowder-Meyer.

My findings suggest that the conditions that underlie many prominent theories of representation

are not met in contemporary American politics. Politicians' beliefs about public opinion are neither accurate nor unbiased enough to facilitate the direct, dyadic representation of public opinion on even the most salient issues in American politics. The findings are united by two themes. First, most people, regardless of whether they are political elites or ordinary citizens, know relatively little about where the median voter stands on major issues or about the size and direction of opinion majorities. Second, perceptions of public opinion tend to be biased in a conservative direction.

First, I show that candidates for state legislature systematically misperceive their constituents' positions on major issues of contemporary American politics. Across a variety of the most prominent issues, politicians overestimate support for conservative issue positions. Conservatives are especially prone to this perceptual bias, but even liberal and Democratic candidates sometimes overestimate support for conservative positions while rarely overestimating support for liberal positions. These patterns of misperceptions could help to explain patterns of asymmetric polarization that have been observed in American politics.

Second, I show that party leaders — the people who recruit these candidates to run — have similar misperceptions of public opinion in their states. These party leaders believe that their states and counties have more conservative preferences than they actually do. These misperceptions play out in their candidate recruitment activities, as party leaders of both parties strongly enforce ideological discipline. However, Republican party leaders prefer more polarized candidates than Democratic party leaders do. It seems that Republican party leaders respond to their perceived constituents' conservatism by working to move their parties to the right.

Third, I show that ordinary citizens' beliefs about public opinion are quite similar to elites'. Citizens' perceptions of opinion in their states are very inaccurate. On average, though, ordinary Americans show a very similar bias to that of elites. Both conservatives and liberals in the mass public believe that conservative issue positions are more popular than they actually are.

Miller and Stokes's (1963) insight holds up after fifty years—representation is a function of the preferences and biases that politicians bring to their activities. Because both electoral and perceptual control operate imperfectly, important asymmetries and information gaps can persist

even among professional sitting legislators. The multidimensional nature of politics, as well as the limited attention that most citizens give to politics, means that politicians' misperceptions can persist.

Political elites' perceptions of public opinion are strongly moderated by partisanship, but only Republicans behave in a way consistent with a motivated reasoning or wishful thinking bias. Among the mass public, party and ideology do not moderate perceptions, but the overall patterns of perceptions remain the same, because people who identify with both parties overestimate their state's conservatism on average. Conservatives are behaving as if they have a wishful thinking bias, but liberals believe their side is not doing nearly as well as it is with the public.

My findings have implications for how we understand what elected officials do and don't do in office and why they are not always in line with public opinion. More broadly, my findings also suggest that assuming that politicians have accurate or complete information about voters is unwise for both scholars and activists. Instead, future work should consider how the information available to political elites shapes their views of what the public believes.

Chapter 3

What Political Elites Believe About Public Opinion, coauthored with David E. Broockman

The sharp increase in elite polarization has been called "the central puzzle of modern American politics" (Poole 2004).[1] Increasingly, scholars hold that polarization is asymmetric, with "the movement of the Republican Party to the right account[ing] for most" of polarization (McCarty 2015*a*).[2] For example, Ahler and Broockman (2017) find that in the years 2008-2016, Democratic Members of the US House voted with the majority of their constituents 69% of the time on roll calls the CCES asked about, whereas Republican Members did so only 52% of the time, barely more often than would be expected by chance. Similarly, Hall (2015, Table A.4) finds that Republican candidates often take positions more extreme than would be electorally optimal, while Democrats do so far less. Scholars have worked to understand how politicians' congruence with public opinion can break down from many perspectives (Achen and Bartels 2016; Bawn et al. 2012; Gilens 2012), but existing theories still struggle to explain such one-sided biases.

In this paper, we argue that politicians can misperceive constituency opinion dramatically and systematically enough to contribute to significant, one-sided biases in representation such as asymmetric polarization. Existing evidence establishes that politicians want to be congruent with constituency opinion, as they change their behavior when they learn more about it (Bergan 2009; Butler and Nickerson 2011). This evidence is consistent with canonical theories that politicians

[1] Quoted in Fiorina and Levendusky (2006).

[2] See also, among others, Grossmann and Hopkins (2015*b*, 2016); Hacker and Pierson (2005, 2015); Mann and Ornstein (2013); McCarty, Poole and Rosenthal (2006); Theriault (2013). This view is by no means universal, but is currently accepted as conventional wisdom among many scholars. See Online Appendix **??** for review.

seek to represent the median voter (e.g., Downs 1957) and empirical findings demonstrating politicians' strong responsiveness to public opinion (e.g., Erikson, MacKuen and Stimson 2002; Erikson 2013). However, classic theories of representation argue that politicians' information environments can leave them imperfectly informed about the median voter's preferences: "the constituency that a representative reacts to is the constituency that he or she sees" (Fenno 1977, p. 883) but "The Representative knows his constituents mostly from dealing with people who do write letters [and] who will attend meetings" (Miller and Stokes 1963, see also Butler and Dynes (2016); Miler (2010)). Extending these theories, we argue that biases in politicians' information environments common across politicians can lead politicians as a whole to systematically misperceive constituency opinion and, in turn, to contribute to systemic breakdowns in dyadic representation like asymmetric polarization.

We demonstrate our argument in the context of the contemporary United States, where conditions for bias in politicians' perceptions of constituency opinion appear ripe. Over the last few decades, and especially during the last decade, actors on the political right built the capacity to "rapidly mobilize large numbers" of conservative citizens to participate in the public spheres representatives monitor (Blee and Creasap 2010) by organizing intense conservative issue publics, coordinating with talk radio programs, and more (Goss 2008; Fang 2013). During the Obama presidency, these forces and "thermostatic" (Wlezien 1995) reactions pushed right-wing activism to new heights (Skocpol and Williamson 2011; Skocpol and Hertel-Fernandez 2016). For example, while voter turnout for conservatives and liberals differs only slightly,[3] conservatives have recently been significantly more likely to participate in the public sphere in other ways, such as by contacting their legislators or attending town hall meetings. These differences are not small: for example, in the 2008 Cooperative Congressional Election Study Republican citizens were 39% more likely than Democrats to indicate they had contacted their US House Member's office to express their opinion, differences that persisted in 2012 but were not evident in previous decades (see Table A.1). The explicit goal of much of conservatives' participation in the public sphere is to

[3]Later in the paper, we show that voters and non-voters have nearly identical average opinions on the issues we study.

shape how politicians perceive the public's demands (e.g., MacGuffie 2009).

In contexts like these, can politicians indeed systematically misperceive constituency opinion on salient issues? To shed light on this question, we gathered one of the most extensive documentations of elite perceptions of constituency opinion ever compiled. This original survey evidence spans two years and 3,765 surveys of American politicians, across which we collected 11,803 elite perceptions of constituency opinion in total. Our main evidence comes from a survey we conducted in 2014 of 1,858 state politicians, motivated by evidence that the same dynamics persist at the state level and by the variation available there. Further, motivated by evidence that polarization is partly a function of newly elected candidates taking more extreme positions than their predecessors (Theriault 2006), we surveyed both incumbents and candidates. We measured these officeholders' and candidates' perceptions of public opinion in their districts across seven issues in total. We then compared these politicians' perceptions of opinion in their constituencies to estimates of actual opinion there, which we computed using Cooperative Congressional Election Study data, to examine whether their politicians' perceptions were significantly or systematically distorted. We also present data from a pilot study we conducted in 2012.

Our evidence reveals that, on average, candidates for state legislature from both parties in 2012 and 2014 believed that support for conservative positions on these issues in their constituencies was much higher than it actually was. These misperceptions are large, pervasive, and robust: politicians' right-skewed misperceptions exceed 20 percentage points on issues such as gun control and persist in states at every level of legislative professionalism, among both candidates and sitting officeholders, among politicians in very competitive districts, and when we compare politicians' perceptions to voters' opinions only. That Democratic politicians also overestimate constituency conservatism suggests these misperceptions cannot be attributed to motivated reasoning or social desirability bias alone.

Why are US politicians' perceptions of constituency opinion systematically skewed to the right? We present additional evidence that suggests a potential mechanism consistent with politicians' information environments playing a role (Miller and Stokes 1963). Not only are

Republican citizens more likely to voice their views to politicians in general, but we show that Republican citizens are especially likely to express their views to politicians who are fellow Republicans. This means that whereas Democratic politicians hear from Republican constituents somewhat disproportionately, Republican politicians appear to hear from Republican constituents very disproportionately. Consistent with this mechanism, we show that much (although not all) of the conservative misperceptions we found are driven by Republican politicians. Appendix Section A finds suggestive evidence that the strength of the partisan imbalance in contact from constituents also correlates with the extent to which politicians overestimate conservatism. Although direct contact with legislators is just one of many asymmetries in citizens' public engagement that could skew politicians' perceptions of constituency opinion, these patterns suggest that direct contact and the other participatory behaviors it proxies for may play an important role.

Consistent with our theoretical argument, these biases in politicians' perceptions of constituency opinion are pervasive enough and considerable enough in magnitude to plausibly contribute to a phenomena like asymmetric polarization. For example, we find that even in districts where majorities of constituents favor same-sex marriage, Republican politicians in these districts perceive their constituents as opposed to same-sex marriage by 3-to-1 on average. Such misperceptions may help explain the puzzle of why so many politicians remain opposed to same-sex marriage even when their constituents favor it (Krimmel, Lax and Phillips 2016).

In concluding we discuss several additional empirical predictions of our theory that are confirmed in other evidence. However, our argument readily allows that US politicians' misperceptions of constituency opinion could change in magnitude or even in direction—such as in response to protest in the wake of the Trump presidency—and that such changes would have important implications. We also discuss several broader implications of our argument and directions for future research. In terms of immediate implications for theories of democratic responsiveness, our findings present a mixed verdict. On the one hand, we find very strong *responsiveness* of politicians' perceptions of constituents' opinions to that opinion (Erikson, MacKuen and Stimson 2002). The correlations between public opinion and politicians' perceptions

of it we find are strong. However, this robust responsiveness belies often large gaps in *congruence* between opinion and perceptions (Achen 1978): politicians' perceptions are offset by an "intercept shift" that leads them to often misperceive majority will.[4] This is consistent with a more nuanced understanding of the relationship between public opinion and public policy (Lax and Phillips 2012). Future research can and should further explore what gives rise to politicians' misperceptions of public opinion, what determines variation in them, and what consequences they have.

THEORETICAL PERSPECTIVES

Politicians' positions and the policies they make are clearly responsive to public opinion (e.g., Erikson, MacKuen and Stimson 2002; Erikson 2013; Tausanovitch and Warshaw 2014), but they are not perfectly congruent with it (e.g., Lax and Phillips 2012). For example, the United States has recently witnessed a sharp increase in asymemtric polarization, wherein Republican politicians take positions that are more extreme than their Democratic counterparts on many issues. What contributes to major biases in democratic representation like this? Existing explanations for phenomena such as asymmetric polarization largely focus on reasons why politicians might have electoral incentives to diverge from the preferences of the median voter (McCarty, Poole and Rosenthal 2006; Hacker and Pierson 2005). These explanations are compelling, but may offer incomplete explanations in some cases. For example, evidence indicates that Republican politicians are even more polarized than would be electorally optimal (Hall 2015; Hall and Snyder 2015; Jacobson 2013).

Classic theories of representation suggest another hypothesis: that politicians may not accurately perceive what their constituents want. These theories argue that although politicians prefer to remain in step with prevailing constituency opinion, they have incomplete information about it and so must rely on imperfect cues (Arnold 1990; Fenno 1977; Kingdon 1967; Miller and Stokes 1963), which they cognitively process with classic behavioral biases (Butler and Dynes 2016; Miler 2010). Consistent with these theories, field experiments show that even a few

[4] Achen (1978) terms this concept "centrism."

dozen calls from constituents or one poll about constituency opinion can change how legislators vote (Bergan 2009; Bergan and Cole 2015; Butler and Nickerson 2011). Evidence from natural experiments, elite survey experiments, elite interviews, and descriptive data support these same conclusions.[5]

In this paper, we extend these theories to consider their potential consequences for aggregate representation. In particular, we argue that systematic biases in politicians' information environments common across politicians could generate significant, widespread biases in their perceptions of their geographic constituencies.[6]

Influential arguments hold that even if politicians do misperceive constituency opinion, such errors will be generally random and cancel out among the collective (Weissberg 1978). However, we argue that forces that bias politicians' perceptions of public opinion can be common across many politicians, leading politicians as a whole to hold systematic misperceptions of their constituents. For example, if certain kinds of individuals are more likely to express their views in the public spheres politicians monitor, these individuals' viewpoints may loom disproportionately large in many politicians' minds as they think about what their geographic constituency wants.[7] If the same kinds of individuals are more active, vocal, and intense across districts, political elites may systematically misperceive public opinion in similar ways, leading to significant biases in aggregate representation like asymmetric polarization.

Over the last several decades, and in the last decade in particular, the conditions for just this kind of systematic bias in politicians' perceptions have been ripe in American politics. During this time, conservative actors have focused on cultivating active issue publics on the right and building the infrastructure to mobilize them to participate in the public sphere (Blee

[5]See Berinsky and Lenz (2014); Druckman and Jacobs (2006); Enos and Hersh (2015); Henderson and Brooks (2016); Jacobs and Shapiro (1995). For example, Druckman and Jacobs (2006) and Jacobs and Shapiro (1995) find that politicians are highly attuned to public opinion data when they do have access to it, although are constrained in the amount of public opinion data to which they do have access.

[6]Fenno (1977) defines the geographic constituency as those residing in politicians' legal district boundaries: "[the geographic constituency] includes the entire population within those boundaries" (p. 884).

[7]For example, when politicians think about what their constituents as a whole want, copartisans, primary voters, and the constituents and groups who are more active, vocal, and intense may be more likely to come to mind (Miler 2010), classic examples of the availability heuristic (Tversky and Kahneman 1973*a*).

and Creasap 2010). A number of scholars have noted that this organized base of conservative groups and voters have tailored their strategies to influence how politicians perceive their constituents' demands (Goss 2008; Hacker and Pierson 2005, 2015; Skocpol and Williamson 2011; Skocpol and Hertel-Fernandez 2016). For example, intending to create the impression that legislators' constituencies were strongly opposed to Barack Obama's legislative proposals in 2009, organizations affiliated with the Tea Party famously surrounded politicians with conservative constituents voicing strenuous opposition at town halls.[8]

The famous 'Tea Party Town Hall Strategy' is just one manifestation of a broader strategy conservative groups and voters have pursued to convince politicians that their constituencies favor conservative policies. For example, journalistic accounts detail how conservative advocacy groups, talk radio hosts, and donors have developed networks and organizations that ensure conservative citizens regularly make politicians hear their voices at town halls, by phone, and otherwise (Fang 2013). Such activity has been in a renaissance on the political right, buoyed in part by a backlash to waves of left-leaning policymaking (such as during the Obama era) and conservative national donors' rising incomes (Blee and Creasap 2010). Meanwhile, its left-wing equivalents have atrophied, with unions in decline (Goss 2008; Hacker and Pierson 2005; Skocpol and Williamson 2011).

Theoretically, our argument predicts that these nationwide efforts to make politicians 'feel the heat' from conservative constituents during the last decade could have pushed politicians' collective perceptions of their geographic constituencies to the right, and their positions to the right in turn. This would likely exacerbate asymmetric polarization by slowing Democrats' leftward moves and hastening Republicans' rightward trajectory.

With this said, it is by no means obvious that such activity would actually bias politicians' perceptions of public opinion pervasively and dramatically enough to contribute to these significant

[8]A strategy memo from one such group recounted that their "objective was to 'pack the hall'" at their member's town hall event and recommended that similar groups be sure their representatives "be made to feel that a majority...opposes" Obama's agenda. Consistent with these efforts to shape politicians' perceptions of their constituency, this group also released a press release claiming that "there are tens of thousands" of other constituents "who agree with us" (MacGuffie 2009).

biases in representation. Politicians may well appreciate that the people who call their offices, attend town hall meetings, write letters to the editor, etc. are unrepresentative.

Unfortunately, despite the central role of politicians' perceptions of public opinion in canonical and contemporary theories, little data on them exists today. Querying politicians' perceptions of opinion was an active area of empirical research in American politics in the 1960s and 1970s,[9] but these classic studies had very small sample sizes and few recent studies have engaged these questions.[10] Much has changed since the 1960s and 1970s, however, including dramatic changes to how politicians communicate with and hear from their constituencies.

In this paper, motivated by the theoretical puzzle of why representation can sometimes break down, we present the results of an extensive data collection effort we undertook to shed new light on what contemporary American politicians believe about public opinion among their constituents. To do so, we leverage technological changes since studies like Miller and Stokes (1963) to examine how politicians perceive their constituents with greater precision and across more issues than was previously possible. We measure these perceptions in the context of state politics, where asymmetric polarization generally persists (Shor 2015) but where variation gives us leverage to test alternative explanations and secondary hypotheses.

DATA: THE 2014 NATIONAL CANDIDATE STUDY

To measure state politicians' perceptions of public opinion, we conducted the 2014 National Candidate Study (NCS), an original combined online and mail survey of sitting state legislators and candidates running for state legislature in the 2014 fielded in October of that year.

To build the sampling frame of candidates running for state legislature and sitting state legislators running for re-election, we obtained their names and contact information from Project

[9]Miller and Stokes (1963) conducted one of the first systematic investigations of how politicians see their constituents, and other scholars in the 1960s and 1970s followed in Miller and Stokes's (1963) footsteps (e.g., Kuklinski and Elling 1977; Uslaner and Weber 1979; Hedlund and Friesema 1972).

[10]One prominent example is the structured interviews conducted by Miler (2010), who finds that legislators and their staff generally think of their constituencies in a fragmented and inaccurate way, recalling only a small subset of relevant constituencies on any given topic.

Vote Smart, which maintains a comprehensive database of candidates for office nationwide, and invited all candidates by both mail and email if possible.[11] 1,803 candidates responded[12] for an overall response rate of 20.8%, substantially higher than most elite surveys and surveys of the general public. 950 of the respondents won their general election and took seats in state legislatures in 2015. 685 already held office. Importantly, the NCS was designed to minimize the chance of staff responding to the survey instead of politicians themselves.[13]

We also conducted a similar survey in 2012, described in Appendix Section A, which we discuss later in the paper to establish the generalizability of our results across election types and issue areas.

Representativeness

The politicians who responded to the 2014 NCS were broadly representative of the overall population of general election candidates for state legislative offices. Figure 3.1 plots the distributions of Obama's share of the 2012 two-party vote in each politician's district and Squire's (2007) measure of state legislative professionalism, with separate density plots for the entire sampling frame of candidates for office and for just the politicians who responded to the NCS. The left column displays the distributions of districts with and without a Democratic respondent, while the right column displays the same for Republican respondents. There are no major differences

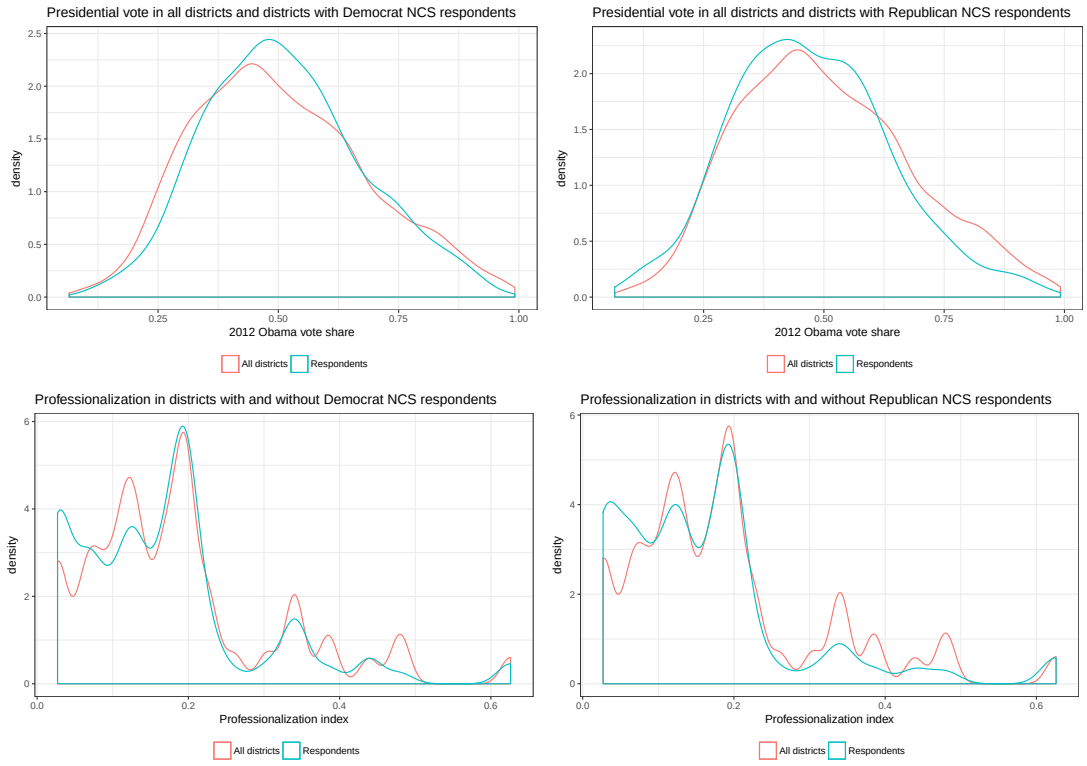
[11] We selected legislators in states that had elections in 2014 (all states except Louisiana, Mississippi, New Jersey, and Virginia). Our analysis excludes respondents from New Hampshire's House floterial districts, who cannot be easily matched to Census geographies. We collected mailing addresses and email addresses for each candidate from Project Vote Smart, restricting our sample to major party candidates. Many candidates had both forms of contact information available and almost all had at least one form. Of the 8,965 candidates listed as running, 8,858 candidates had a mailing address available and 4,775 candidates had an email address available. In early October, all candidates for whom we had a mailing address on file received a postcard announcing the survey. Candidates with email addresses on file then received three email invitations over the course of about three weeks. In mid-October, all candidates with mailing addresses on file who had not already taken the online version of the survey received a paper copy of the survey that they had the opportunity to mail back to us.

[12] 1,175 responded to the email solicitation, 84 responded online after receiving the mail version, and 610 returned the paper version of the survey, for a total sample size of 1,803 politicians.

[13] In particular, the online version of the survey had a screener question that shut down the survey if the respondent did not report personally being a candidate. The paper version of the survey also included this screener question, with bold text that said that the survey was only for candidates. Also, where multiple email or mailing addresses were available in the Project Vote Smart database, we chose the ones most likely to be the candidate's home address or personal email as opposed to campaign office addresses.

that would suggest that our respondents from either party are unrepresentative of the broader population of state legislative districts. Online Appendix A provides additional representativeness assessments. There we find that Democrats and non-incumbents were slightly more likely to respond, and so later in the paper we show the results separated by party and incumbency status. We do not find any differences between response rates for those who were running for upper or lower legislative chambers. There we also give the question wording for the questions we asked about candidates' ideology and the number of polls they took.

Figure 3.1: Representativeness of politicians who responded, by party, presidential vote share in the district, and state legislative professionalization.



Issues and Instrumentation

In order to compare elites' perceptions to reasonably precise estimates of true public opinion, we asked them to estimate constituency opinion on items that were being contemporaneously asked in the 2014 CCES, a large sample survey ($N = 56,200$) (Ansolabehere and Schaffner 2015). We

were therefore constrained in the kinds of issues we could ask about, as the CCES only asked the full public sample about their opinions on a limited set of issues. However, the CCES had several issue items that corresponded well to debates that were highly publicly salient in states during this period, including debates over same-sex marriage, gun control, immigration,[14] and abortion. Most of these are relatively salient, "easy" issues where public opinion has remained relatively stable, so we expected politicians to be especially likely to have accurate estimates of them. (Later we present data from a study in 2012 that has two economic issues.)

In Table 3.1 we report the specific CCES items we asked politicians to estimate. We also report the national level of support among opinion holders from the 2014 CCES, using the weights provided by the CCES, and among voters the CCES validated to have ultimately voted in 2014. We also report whether a response of "Yes" to the issue question reflects a conservative or liberal preference, and whether the issue question would reflect a change in the status quo at the national level. As Table 3.1 indicates, the issue questions we chose vary along these dimensions. This was a deliberate choice: we wanted a mix of popular, unpopular, and controversial policy statements to avoid ceiling or floor effects in politicians' estimates of opinion. We did not always want a "Yes" response to the survey question to represent a particular ideological direction, nor did we want all of the questions to represent a status quo change. We were, however, constrained to issues covered in the common content of the CCES, the only publicly available survey with a sample size large enough for our purpose.Appendix Section A shows that the national means on the CCES to these items are similar to the national means for similar items on other surveys, suggesting representativeness issues with the CCES are unlikely to have spuriously generated our main findings.[15]

Following Warshaw and Rodden (2012), CCES respondents are matched to state legislative districts using their ZIP code and their race. Nearly all respondents are matched to districts with

[14]Even though much immigration policy is inherently a federal issue, states faced numerous questions during this period about whether to extend 'sanctuary' status to undocumented immigrants, whether to allow immigrants to get driver's licenses, etc. One of our immigration items closely aligns with the hotly contested debate over Arizona's SB1070.

[15]Our findings that many liberal policies are popular in many districts is broadly consistent with Ellis and Stimson (2012*a*), who find that Americans tend to have liberal views on specific policies.

Table 3.1: Issue questions from the 2014 National Candidate Study, with weighted national levels of support from the CCES.

Issue Item Wording	National Mean	Mean Among 2014 Voters	'Yes' direction	Status quo change?
"Allow gays and lesbians to marry legally."	56%	54%	Liberal	Some states
"Let employers and insurers refuse to cover birth control and other health services that violate their religious beliefs."	43%	47%	Conservative	No
"Require background checks for all gun sales, including at gun shows and over the Internet."	87%	86%	Liberal	Yes
"Ban assault rifles."	61%	60%	Liberal	Yes
"Allow police to question anyone they think may be in the country illegally."	37%	41%	Conservative	Yes
"Grant legal status to all illegal immigrants who have held jobs and paid taxes for at least 3 years, and not been convicted of any felony crimes."	47%	46%	Liberal	Yes
"Always allow a woman to obtain an abortion as a matter of choice."	57%	54%	Liberal	Yes

certainty, although to avoid biases from dropping respondents, we conduct a full join and weight observations based on the certainty with which they are matched.[16]

To examine politicians' beliefs about the districts in which they were running, the NCS asked each politician to estimate, "What percent of the people living in your district would agree with the following statements?" before providing a subsample of the items in Table 3.1 with essentially

[16]We use the Missouri Census Data Center's MABLE/Geocorr tool to match zip codes to state legislative districts.

the exact same wordings that appeared on the 2014 CCES.[17] We chose this question wording to measure political elites' perceptions of their geographic constituency's opinion because it most closely maps to the theoretical puzzle that motivated our study, asymmetric polarization, which makes important observations about median constituency opinion. In addition, it is possible to objectively measure the correct answer to this question.[18]

POLITICIANS' PERCEPTIONS OF CONSTITUENCY OPINION

We use two empirical strategies to examine the accuracy of politicians' perceptions of their districts. Our first strategy is to estimate a grand (weighted) mean of opinion across all districts where politicians responded and compare this to the mean of their perceptions. Our second strategy is to compute estimates of opinion in each district using MRP. Neither of these approaches rely on us having completely accurate estimates of of public opinion in any particular district; rather, we rely on average differences across districts. Moreover, although each of these approaches entails differing assumptions, they ultimately yield highly similar conclusions.

Empirical Strategy 1: Raw Data

For our first approach, we compare the average of politicians' perceptions across all the districts where politicians responded to the CCES estimate of public opinion across all the districts where politicians responded. Our estimation strategy is as follows. Let C represent the set of all CCES respondents who live in districts where a politician responded to our survey, with CCES respondents indexed by c and issues by i. Denote opinions expressed on issue i by CCES

[17] Table A.4 shows the wording of the NCS items we used to query politicians' perceptions, as also shown in Table 3.1, alongside the wording for the original items on the CCES. As can be seen, we constructed the item wordings to be essentially identical. All elite respondents were shown the first two items, about same-sex marriage and birth control exemptions. Respondents were randomly assigned one of the two items about gun control, one of the two items about immigration, and one of two items about abortion, such that each respondent made five total estimates. One of the abortion items was dropped from our analysis, as described in the Online Appendix.

[18] We also could have also asked politicians to estimate opinion among 'subconstituencies' beyond their geographic constituency, such as among those who care most about an issue, among fellow partisans, or among other groups (Fenno 1977). We would encourage further research to add to our findings by doing so. We believe politicians' perceptions of public opinion within such subconstituencies are also important; focusing on overall opinion in politicians' geographic constituencies simply represents a starting point given our particular theory and motivation.

respondent c as $o_{c,i}$. All the CCES questions we use are binary choice, such that $o_{c,i} \in \{0, 1\}$. Let $p_{c,i}$ represent the perception of the politician in c's district of average support for issue i; that is, $p_{c,i}$ is a politician's estimate of $E(o_{c,i})$ for their district. The average of $p_{c,i} - o_{c,i}$ within each district thus represents an estimate of politicians' average overestimation of support for policy i. For example, suppose a politician perceives support for a policy in their district at 80% but true support is only 60%. In this example, $E(p_{c,i} - o_{c,i}) = 0.8 - E(o_{c,i}) = 0.8 - 0.6 = 0.2$. To estimate politicians' average overestimation of support for issue i, we estimate the mean of $p_{c,i} - o_{c,i}$ across all the CCES respondents.[19] To incorporate the CCES sampling weights, we take the weighted mean of this quantity, multiplying by the CCES weights w_c, which have mean 1. In addition, because the CCES has many more respondents from larger districts than smaller districts, we weight these estimates inversely to district size so that politicians from large districts and small districts matter equally. In particular, we weight each CCES observation by $\frac{\bar{s_c}}{s_c}$, where s_c is the size of each CCES respondents' district in 2014 according to the US Census. This makes politicians the effective unit of analysis and counts politicians from small and large districts equally. Our results are similar regardless of the weighting approach we use, however.

Given this setup, politicians' mean perception can be estimated with:

$$\widehat{\bar{p}_i} = \frac{\sum_{c \in C} \left[p_{c,i} w_c * \frac{\bar{s_c}}{s_c} \right]}{n(C)} \approx \bar{p}_i, \tag{3.1}$$

where $n(C)$ is the number of CCES respondents. We can estimate public opinion in the average district – what politicians' average perceptions would be if their perceptions were perfectly accurate – using:

$$\widehat{\bar{o}_{c,i}} = \frac{\sum_{c \in C} \left[o_{c,i} w_c * \frac{\bar{s_c}}{s_c} \right]}{n(C)}. \tag{3.2}$$

[19] We acknowledge Doug Rivers for this suggestion.

This quantity can be interpreted as 'the expectation of district opinion in the district of a politician who responded chosen at random.'

Ultimately, we seek to estimate $\bar{y}_i$, politicians' average overestimation of district support for issue i:

$$\widehat{\bar{y}_i} = \frac{\sum_{c \in C} \left[(p_{c,i} - o_{c,i}) w_c * \frac{\bar{s_c}}{s_c} \right]}{n(C)}. \tag{3.3}$$

The standard errors of our estimates of each of these quantities are cluster bootstrapped, with clustering at the district level for politicians and misperceptions and at the respondent level for public opinion.

Figure 3.2: Politicians' perceptions of district opinion and true district opinion

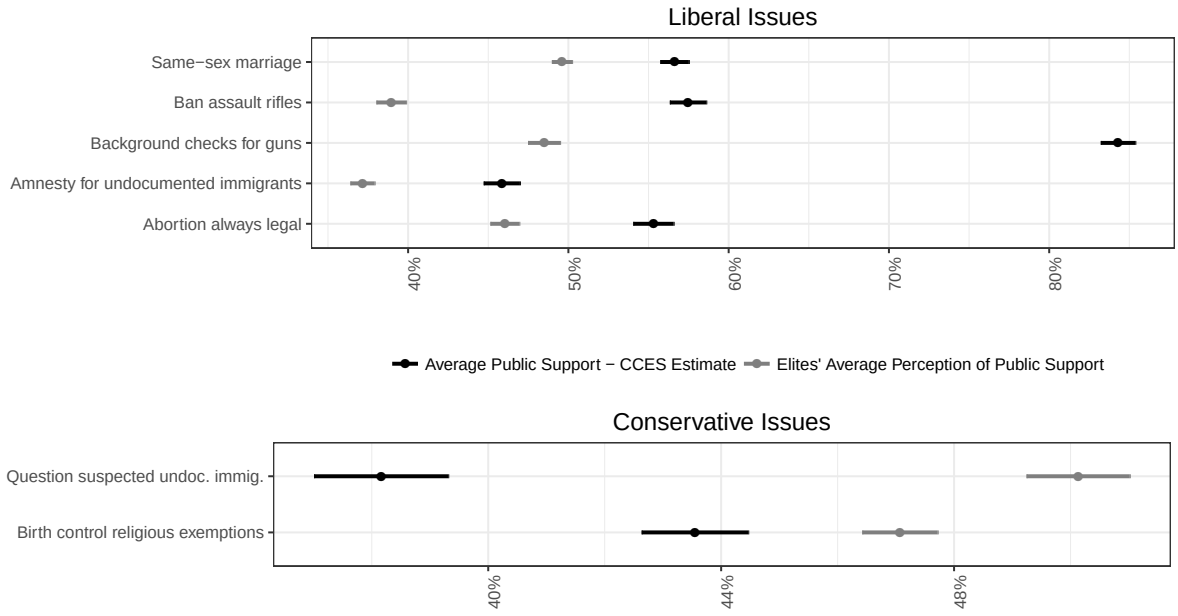


Figure 3.2 and Table 3.2 show the results of this approach. For example, when it comes to the issue of same-sex marriage, we estimate that 56.6% of residents of the 'average district' supported same-sex marriage, whereas NCS respondents on average perceived their districts as 49.6% supportive, meaning they on average overestimated opposition to same-sex marriage

Table 3.2: Raw data estimates of politicians' perceptions, true district opinion, and politicians' misperceptions

Issue	Actual Public Opinion	Elite Perception	**Average Misperception**
	2014 Politicians - Liberal Policies		
Same-sex marriage	56.63	49.60	-7.03***
	(0.89)	(0.63)	(0.91)
Ban assault rifles	57.47	38.95	-18.46***
	(1.14)	(0.93)	(1.32)
Background checks for guns	84.30	48.48	-35.79***
	(1.08)	(1.00)	(1.34)
Amnesty for undocumented immigrants	45.85	37.16	-8.69***
	(1.13)	(0.76)	(1.14)
Abortion always legal	55.31	46.04	-9.28***
	(1.26)	(0.90)	(1.29)
	2014 Politicians - Conservative Policies		
Question suspected undoc. immig.	38.16	50.13	11.97***
	(1.15)	(0.89)	(1.31)
Birth control religious exemptions	43.55	47.07	3.57***
	(0.92)	(0.65)	(0.95)

*** = $p < 0.001$. ** = $p < 0.01$. * = $p < 0.05$. *Notes: Standard errors are cluster bootstrapped at the CCES respondent level for public opinion and at the district level for elite perceptions and for misperceptions.*

by about 7 percentage points. Elites likewise overestimate the percentage of the public that supports conservative policy positions across all the other policies. Politicians' overestimation of conservatism is even larger on other issues, with a maximum of about 36 percentage points for the issue of background checks for guns — one of the issues where previous research indicates conservative constituents are the most well-organized and likely to participate in the public sphere (Goss 2008).

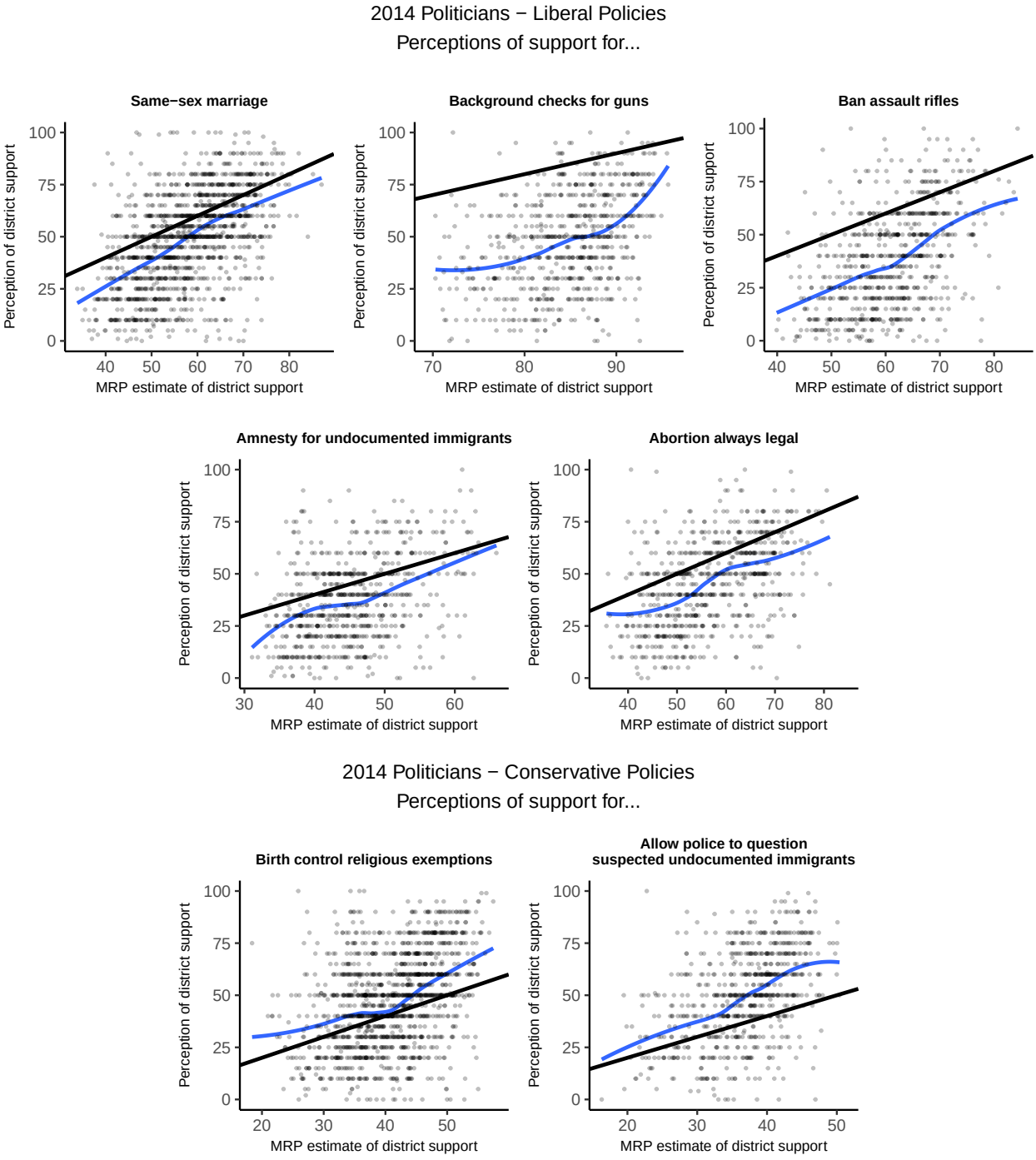
Later in the paper we also conduct this analysis for only incumbents, for only candidates who won their elections, for only candidates in very close and competitive districts, and for only those who ran in states with professionalized legislatures. The results are unchanged, suggesting that these results are not an artifact of responses from unserious candidates who went on to lose.

Empirical Strategy 2: MRP

We gain additional inferential leverage on the relationship between politicians' perceptions and true geographic constituency opinion by estimating support for each issue in all of the nation's state legislative districts using multilevel regression and poststratification (MRP) (Eggers and Lauderdale 2016; Hanretty, Lauderdale and Vivyan 2016; Lax and Phillips 2009*a*,*b*, 2012; Park, Gelman and Bafumi 2004; Warshaw and Rodden 2012). This facilitates more nuanced dyadic comparisons of politicians' perceptions and estimates of opinion in their specific districts, in addition to illustrating the robustness of our results to any concerns with the raw data analysis. More details on our MRP procedure are in Appendix Section C. There we also present robustness checks and estimates of uncertainty. MRP uses individual-level survey data and demographic information about the districts from the US Census to construct district-level estimates of support for each issue. Our MRP procedure first fits multilevel choice models to the responses to each issue question from the 2014 CCES. Each model returns estimated effects for demographic and geographic predictors. We then use the estimates from the multilevel model to estimate support for various demographic cells, identified by age, race, education, gender and district. Finally, using data from the US Census' American Community Survey, we weight those cells by their frequency in each district. The result is an estimate of the percent of each district supporting each issue. We then matched these estimates for each district with politicians' perceptions of that district.

Figure 3.3 shows the result. Each panel of Figure 3.3 shows the results for one issue. In each panel, we show how politicians' perceptions of public opinion on that issue vary as a function of the MRP estimate of true public opinion on that issue in their district. The y-axis in each panel represents politicians' estimates of support in their districts and the x-axis shows the MRP estimates of public opinion in these same districts. Each point on the graph represents one politician's response. The striated bands of responses reflect that politicians usually answered in increments of 5 percentage points. Loess smoothers summarize the average of politicians' perceptions in each district as a function of the MRP estimate of district support. The straight black line represents the function $y = x$, where politicians would have answered on average were

Figure 3.3: Politicians' perceptions of district opinion as a function of MRP estimates of district opinion.



Notes: The black line represents $y = x$, or how politicians would have responded on average if they were perfectly accurate.

they perfectly accurate.[20] For simplicity, we organize the figures by first presenting questions where higher values of support reflect a liberal position, then questions where higher values of support reflect a conservative position.

Figure 3.3 vividly illustrates the nuanced nature of our findings for democratic responsiveness. On the one hand, politicians are strongly responsive to public opinion, in the sense that there is a strong and strikingly linear relationship between our estimates of reality and their perceptions.[21] Yet, there is a substantial "intercept shift" in every panel in Figure 3.3, such that politicians substantially overestimate support for conservative positions and underestimate support for liberal ones. Such misperceptions are unlikely to disappear in aggregate, unlike simple random errors in individual politicians' perceptions would (Weissberg 1978).

The magnitude of these shifts corresponds well with the point estimates from the raw data approach. As before, these elites are especially inaccurate on the gun control policies, which command broad support across districts. Indeed, we estimate that banning assault rifles has majority support in almost all districts and that support for background checks is over 70 percent in all districts, despite the fact that most politicians perceive the public as fairly evenly divided or even opposed to these measures. Appendix A also presents 95% confidence intervals for the size of politicians' errors and their overestimation of conservatism as calculated on the basis of the MRP estimates; these intervals are similar in width to the 95% confidence intervals of the raw data estimates.

Robustness Across Election Types and Issues: Pilot Study in 2012

We next present data from a study we conducted in 2012 that speaks to the robustness of our findings in two ways: it included data on two additional economic issues and was conducted in a

[20]Given sampling variability in the MRP estimate we would not expect politicians' responses to match the MRP estimates exactly, but we would expect the averages to align.

[21]The correlations between our perception estimates and the MRP estimates are also strong, although these correlations are not straightforward to interpret for several reasons, including that they are likely to be biased downward by sampling error in our public opinion estimates (Achen 1977).

presidential election year. Further information on this sample is in Online Appendix A.[22]

In this 2012 study we asked candidates running for state legislature to estimate district support for three issues in their districts: same-sex marriage, universal healthcare, and abolishing all federal welfare programs. Table A.3 presents question wording and weighted national support for these three issues.

Our measures of public opinion on these issues come from different years of the CCES, determined by question availability. This introduces two main weaknesses we hasten to note. First, the closest healthcare question on the CCES was four years old and not an exact wording match, a question on the 2008 CCES which also included the phrase "even if it means raising taxes."[23] Second, the question about all federal welfare programs only appeared on a (random) subsample of the CCES and only two years prior, in 2010.

We see similar patterns in the 2012 data. In particular, Figure A.1 and Table 3.3 show candidates' average perceptions of public opinion on these three issues and the CCES estimates of public support in the 'average district.' We consistently find that they overestimate support for conservative positions by between 11 and 22 percentage points. For example, on the question of whether to abolish all federal welfare programs—an extreme conservative policy that very few Americans favor—support in the average district is approximately 9%, but politicians perceive it to be many times that, at almost 32%.[24]

Robustness Across Legislators, States, and Voters

The conservative biases we uncovered in politicians' perceptions of public opinion are robust across statistical methods, weighting approaches, states, districts, years, issues, and reference

[22]In general, the 2012 NCS was quite similar in design to the 2014 NCS and achieved a similarly high response rate and fairly representative sample. We received 1,606 responses in total in 2012, with 655 of these coming from incumbents, 270 from non-incumbents who won and served in 2013, and 681 from non-incumbents who lost.

[23]This wording change should bias against our findings, however, as mentioning taxes in a question about universal healthcare should make our estimate of public support for this policy more conservative. Consistent with this, other national surveys with the question wording we presented on the NCS yield means that are even more supportive.

[24]A post-election survey in 2012 also found that these same misperceptions persisted after the election, suggesting they are also not an artifact of the time of the electoral cycle at which we asked them.

Table 3.3: Raw data estimates of politicians' perceptions, true district opinion, and politicians' misperceptions, 2012 Pilot Study

Issue	Actual Public Opinion	Elite Perception	**Average Misperception**
	2012 Politicians - Liberal Policies		
Universal healthcare	57.29	43.45	-13.48***
	(1.06)	(0.57)	(1.12)
Same-sex marriage	54.47	43.21	-11.26***
	(1.15)	(0.85)	(1.15)
	2012 Politicians - Conservative Policy		
Abolish all fed.	9.44	31.90	22.04***
welfare programs	(2.04)	(0.63)	(2.24)

*** = $p < 0.001$. ** = $p < 0.01$. * = $p < 0.05$. *Notes: Standard errors are cluster bootstrapped at the CCES respondent level for public opinion and at the district level for elite perceptions and for misperceptions.*

populations.

First, the results we presented above effectively used politicians as the unit of analysis, weighting the misperceptions of those in small districts with few constituents just as much as those with hundreds of thousands of constituents, like California State Senators. This raises the possibility that our findings are driven by politicians who represent small districts. Column 1 of Table 3.4 shows the main misperception results remain the same when the data is reweighted in the opposite manner, such that all CCES respondents are weighted equally but politicians who represent larger districts are weighted higher.

Other robustness checks are similarly encouraging. The next column of Table 3.4 shows the results when we subset to states with highly professionalized legislatures only, as measured by the Squire (2007) index of state legislative professionalism.[25] The results look similar for the state politicians whose campaigns and offices look much more similar to highly professionalized bodies. Although whether our findings would generalize to Members of Congress is an open question, this finding is provisionally encouraging. The next two columns of Table 3.4 show that the results also remain unchanged when we examine only politicians who won (e.g., for the 2014 data, those who

[25]We examine states where the Squire (2007) index is greater than 0.2. These are AK, AZ, CA, CO, FL, HI, IL, MA, MI, NY, OH, PA, and WI.

were in office as of 2015) and when we examine incumbents only (e.g., for the 2014 data, those who were in office in 2014 and seeking re-election).

The next to last column of Table 3.4 shows that the results also hold when we subset to only the very most competitive districts in the sample using a stringent inclusion criteria: where Obama vote share was between 45% and 55% in 2012. The standard errors increase because this is a smaller subsample, but the point estimates remain similar.

In the last column of Table 3.4, we show that the results also hold when we compute public opinion among CCES respondents who administrative records show voted in the 2014 election and compare politicians' perceptions of their districts to these voters' opinion. We still find similar overall results.

Table 3.4: Robustness of misperceptions across subsamples and approaches

	Average Misperceptions					
Issue	Weighting to Constituents	Professionalized Legislatures Only	Winners Only	Incumbents Only	Competitive Districts Only	2014 Voter Opinion Only
			2014 Politicians - Liberal Policies			
Abortion always legal	-10.0*** (1.2)	-11.6*** (1.8)	-9.3*** (1.6)	-9.5*** (1.8)	-8.5* (3.4)	-8.5*** (1.5)
Ban assault rifles	-18.2*** (1.3)	-20.8*** (1.9)	-15.9*** (1.6)	-14.8*** (2.0)	-22.2*** (2.7)	-19.6*** (1.6)
Background checks for guns	-36.1*** (1.5)	-35.2*** (2.1)	-35.3*** (1.7)	-32.0*** (2.2)	-31.9*** (3.8)	-37.3*** (1.4)
Amnesty for undoc. immigrants	-7.7*** (1.1)	-5.9** (2.1)	-8.2*** (1.5)	-5.4** (1.7)	-12.9*** (2.6)	-8.0*** (1.4)
Same-sex marriage	-7.9*** (0.9)	-7.8*** (1.4)	-6.5*** (1.2)	-5.9*** (1.4)	-4.7 (2.5)	-6.1*** (1.1)
			2012 Politicians - Liberal Policies			
Universal healthcare	-14.9*** (0.9)	-12.9*** (1.3)	-15.1*** (1.5)	-13.5*** (1.6)	-13.7*** (2.0)	-
Same-sex marriage	-12.3*** (0.9)	-11.4*** (1.4)	-9.7*** (1.5)	-9.2*** (1.7)	-10.7*** (2.1)	-
			2014 Politicians - Conservative Policies			
Question suspected undoc. immig.	11.7*** (1.2)	11.4*** (2.0)	12.4*** (1.8)	11.3*** (2.3)	13.7*** (2.5)	9.5*** (1.6)
Birth control religious exemptions	1.5 (1.0)	1.2 (1.6)	4.8*** (1.3)	3.2* (1.5)	2.2 (2.2)	-0.3 (1.2)
			2012 Politicians - Conservative Policy			
Abolish fed. welfare programs	20.5*** (2.0)	18.8*** (3.3)	23.2*** (2.8)	26.4*** (3.1)	14.9*** (4.4)	-

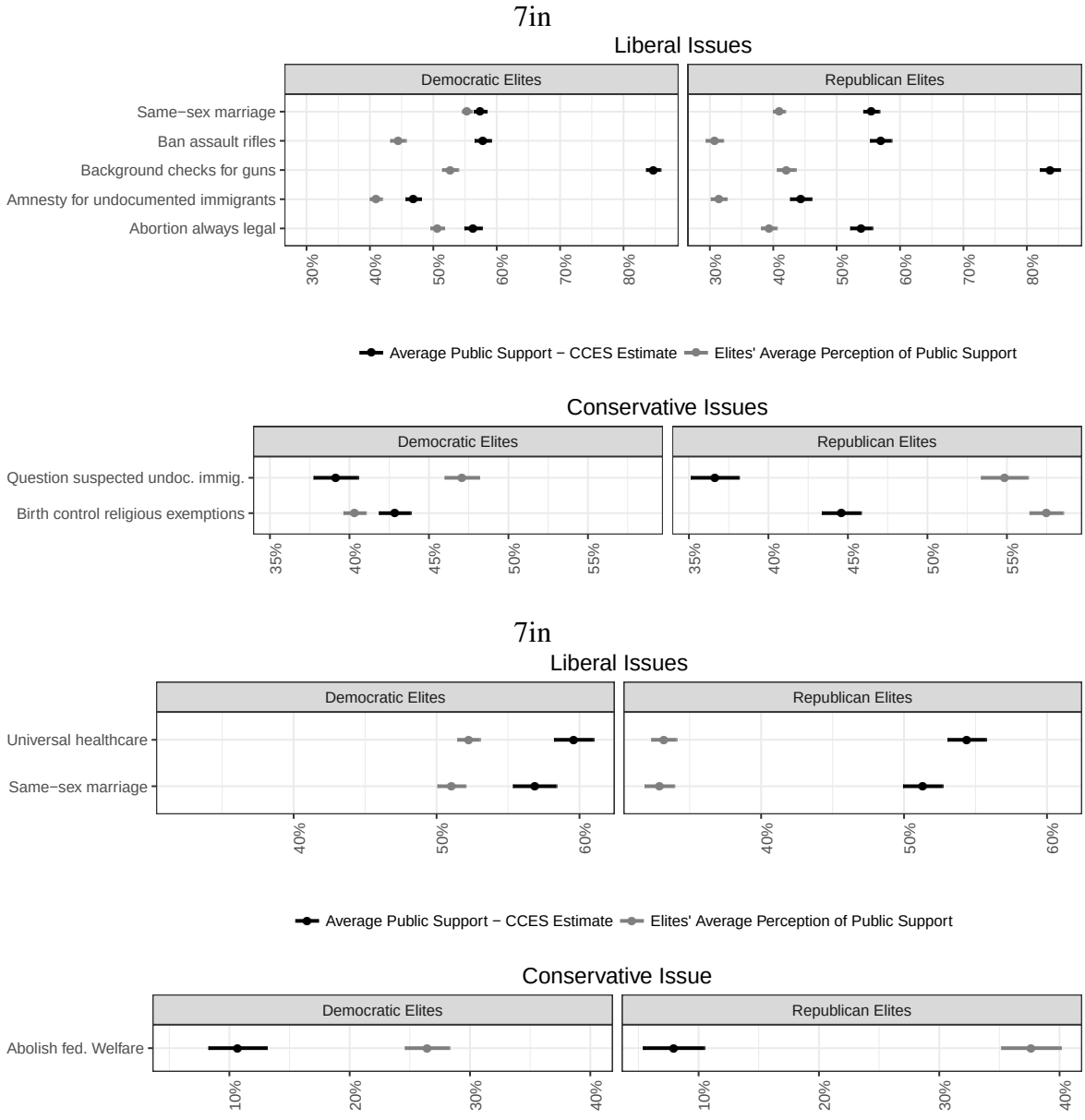
*** = $p < 0.001$. ** = $p < 0.01$. * = $p < 0.05$.

When we examine the patterns of misperceptions by politicians' party, it is clear that Republican politicians drive the bulk of the conservative-leaning misperceptions we found. Figure 3.4 and Table 3.5 show that Republican politicians and Democratic politicians both overestimate their constituents' conservatism, but that Republican politicians do so to a much greater extent. Democrats and Republicans both overestimate their constituents' conservatism on every single issue, with the one exception that Democrats very slightly underestimate support for the conservative birth control religious exemptions policy. Republicans overestimate support for the conservative position on every issue by over 10 percentage points, and often by over 20 percentage points. Republicans also overestimate conservatism more than Democrats every issue, often by over 10 percentage points more.

These differences are especially stark when examining the relationship between district opinion and politicians' perceptions visually with the aid of MRP. Figure 3.7 shows a version of Figure 3.3 with the results split by politicians' party. For example, on the issue of same-sex marriage, constituency support must be at roughly 55% before the majority of Democratic candidates believe their constituencies barely favor same-sex marriage. Republicans, on the other hand, almost never believe their constituents favor same-sex marriage; district support must be above 70% before they think their constituents are barely in favor. Likewise, in districts where the public is evenly split on same-sex marriage, the average Republican believes the public is opposed by nearly 3-to-1. Such patterns seem likely to help explain the puzzle of why so many Republican politicians remain opposed to same-sex marriage even though their constituents favor it (e.g., Krimmel, Lax and Phillips 2016); Republicans do not appear to realize this is the case. Intriguingly, even though the correlation between public opinion and perception of this opinion is similar for Republicans and Democrats, Republicans' greater "intercept shift" means that they misperceive public opinion far more.

With this said, Figure 3.7 also rules two simple alternative explanations for our findings. First,

Figure 3.6: 2012 Study



Notes: The Figure shows our estimates of public support in the average district where an elite responded, in black, and the average political elites' perception of support in those districts, in grey. The subfigures are broken down by year, whether a "yes" on the issue is liberal or conservative, and the party of the elite.

we can rule out the possibility that politicians simply will not admit to us that they are on the wrong side of the median voter. In fact, on essentially every issue, we see that substantial numbers of politicians indicated to us that they believed their party's position (which is nearly always

Table 3.5: Partisan differences in misperceptions: raw data

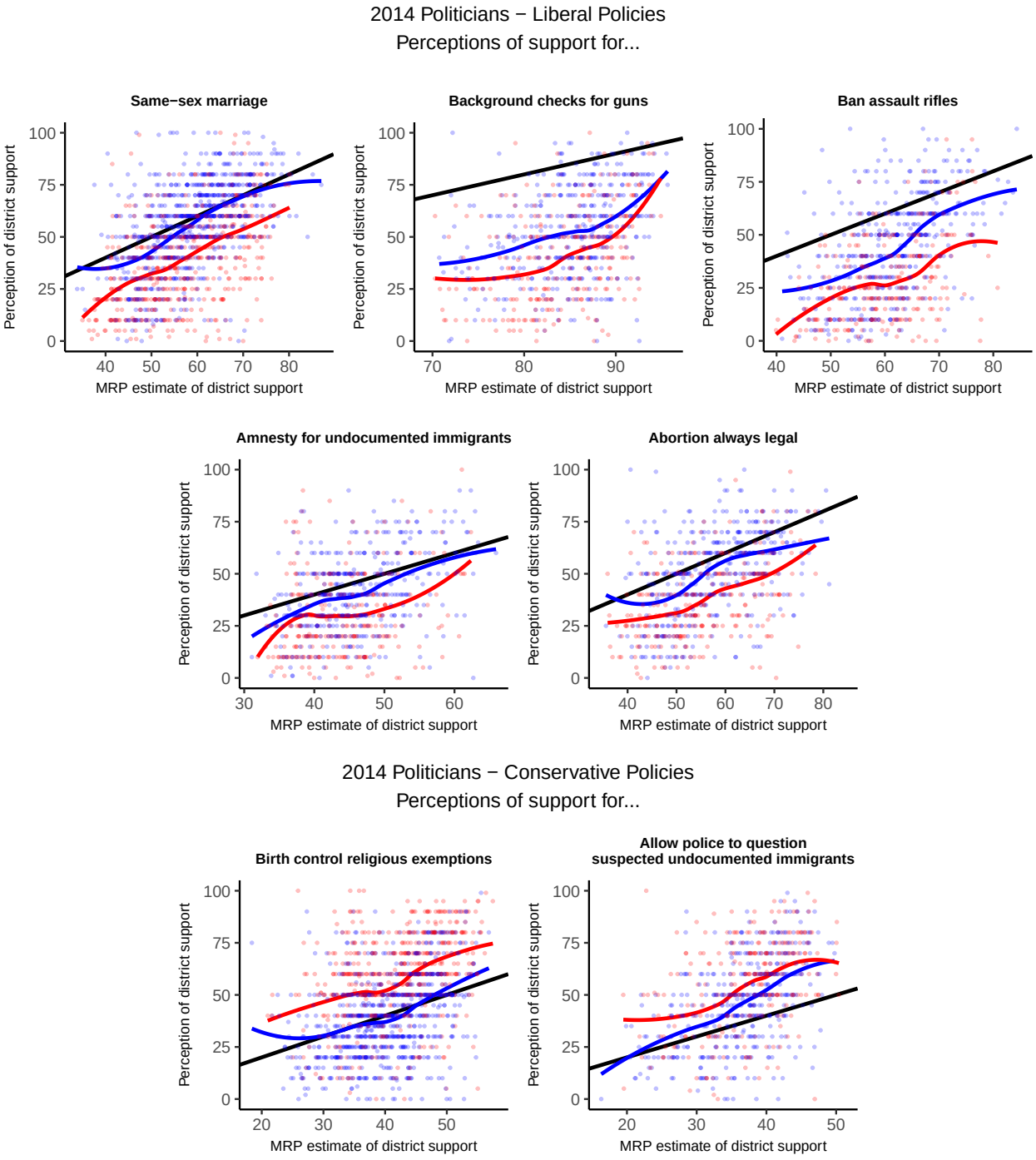
Issue	Democratic Elites			Republican Elites		
	Actual Public Opinion	Elite Perception	**Average Misperception**	Actual Public Opinion	Elite Perception	**Average Misperception**
2014 Politicians - Liberal Policies						
Abortion always legal	56.29	50.66	-5.65***	53.89	39.29	-14.56***
	(1.39)	(1.15)	(1.55)	(1.72)	(1.24)	(1.78)
Ban assault rifles	57.82	44.36	-13.36***	56.97	30.71	-26.23***
	(1.22)	(1.27)	(1.58)	(1.67)	(1.36)	(1.95)
Background checks for guns	84.71	52.67	-32.04***	83.66	42.05	-41.58***
	(1.06)	(1.32)	(1.50)	(1.60)	(1.48)	(2.04)
Amnesty for undoc. immigrants	46.85	40.95	-5.90***	44.35	31.42	-12.93***
	(1.28)	(0.95)	(1.23)	(1.68)	(1.24)	(1.86)
Same-sex marriage	57.40	55.32	-2.09*	55.47	40.91	-14.54***
	(0.93)	(0.78)	(0.98)	(1.27)	(0.89)	(1.36)
2012 Politicians - Liberal Policies						
Universal healthcare	59.60	52.24	-7.35***	54.39	33.20	-21.19***
	(1.38)	(0.79)	(1.47)	(1.35)	(0.88)	(1.47)
Same-sex marriage	56.87	51.05	-5.82***	51.31	32.89	-18.43***
	(1.52)	(0.99)	(1.58)	(1.38)	(1.04)	(1.51)
2014 Politicians - Conservative Policies						
Question suspected undoc. immig.	39.15	47.08	7.93***	36.64	54.85	18.22***
	(1.43)	(1.17)	(1.59)	(1.42)	(1.55)	(1.84)
Birth control religious exemptions	42.86	40.25	-2.53*	44.59	57.53	12.89***
	(0.99)	(0.72)	(1.13)	(1.28)	(0.98)	(1.57)
2012 Politicians - Conservative Policy						
Abolish fed. welfare programs	10.69	26.44	15.76***	7.92	37.64	29.72***
	(2.43)	(1.85)	(2.28)	(2.55)	(2.48)	(3.61)

*** = $p < 0.001$, ** = $p < 0.01$, * = $p < 0.05$.

their own) is the minority position in the district — even in many cases where we are confident the majority of voters actually do share their party's view! Second, Democratic politicians also overestimate constituency conservatism, which suggests these misperceptions cannot be attributed to motivated reasoning or social desirability bias alone.

As with our previous results, these partisan differences in misperceptions are robust when we examine incumbents only, winners only, and weight to voters. The first two columns of Table 3.6 show that they are also robust in professionalized legislatures only. The next two columns show that they also remain similar in the subset of very competitive districts where Obama received between 45% and 55% of the two-party vote in 2012. This is a smaller subset of districts, and so the standard errors increase, but the point estimates remain similar.

Figure 3.7: Partisan differences in misperceptions: MRP



The final two columns of Table 3.6 present a result that bears special note: that the same partisan difference in misperceptions also holds in just the subset of districts where we received responses from both the Democratic and Republican candidate in a district. The standard errors are much larger because this was a rare occurrence, but this allows us to hold constant public opinion and show that Democrats and Republicans see the same constituents differently. This means we can confidently reject the alternative explanation that politicians perceive opinion accurately but that our estimates or inherent flaws in public opinion data in general (or the CCES in particular) are responsible for introducing bias; if two politicians perceive the same district differently, they cannot both be right. Moreover, given the similar marginal distributions on the same issues on national polls as on the CCES presented in Online Appendix A, it is highly likely that Democrats' perceptions are more accurate.

Table 3.6: Robustness of partisan difference in misperceptions

	Average Misperception					
	Professionalized Legislatures		Competitive Districts		Both Parties Responded	
Issue	Democrats	Republicans	Democrats	Republicans	Democrats	Republicans
			2014 Politicians - Liberal Policies			
Abortion always	-7.19**	-17.36***	-3.18	-15.94**	1.12	-6.89
legal	(2.21)	(2.69)	(3.68)	(4.86)	(5.81)	(7.00)
Ban assault	-16.77***	-26.50***	-19.99***	-25.06***	-10.54	-23.37***
rifles	(2.40)	(3.02)	(3.46)	(3.71)	(6.62)	(4.97)
Background checks	-30.48***	-45.13***	-27.34***	-40.73***	-27.81**	-39.39***
for guns	(2.35)	(3.34)	(4.28)	(4.73)	(9.36)	(7.58)
Amnesty for	-2.79	-11.65*	-9.80**	-16.94***	-13.43***	-16.38**
undoc. immigrants	(1.89)	(4.58)	(3.41)	(3.88)	(3.76)	(5.21)
Same-sex	-2.39	-17.00***	-0.20	-11.88**	2.96	-9.78**
marriage	(1.48)	(2.48)	(2.24)	(3.75)	(3.04)	(3.23)
			2012 Politicians - Liberal Policies			
Universal	-7.20***	-22.12***	-20.23***	-7.20***	-5.52	-16.24***
healthcare	(1.44)	(2.07)	(2.89)	(1.44)	(3.90)	(3.62)
Same-sex	-5.14***	-21.32***	-17.59***	-5.14***	-1.90	-17.56***
marriage	(1.45)	(1.92)	(3.27)	(1.45)	(2.82)	(3.88)
			2014 Politicians - Conservative Policies			
Question suspected	9.84***	14.07***	9.87***	21.04***	13.11	23.59***
undoc. immig.	(2.72)	(2.85)	(2.71)	(4.45)	(7.17)	(5.77)
Birth control	-3.23	8.87**	-3.51	11.25**	-4.49	14.42***
religious exemptions	(1.86)	(2.72)	(2.29)	(3.57)	(3.08)	(3.14)
			2012 Politicians - Conservative Policy			
Abolish fed.	14.47***	25.37***	16.80*	14.47***	24.28***	31.78***
welfare programs	(3.12)	(5.99)	(8.18)	(3.12)	(5.36)	(6.06)

Do Omitted Variables Drive Partisan Differences in Perceptions of Public Opinion?

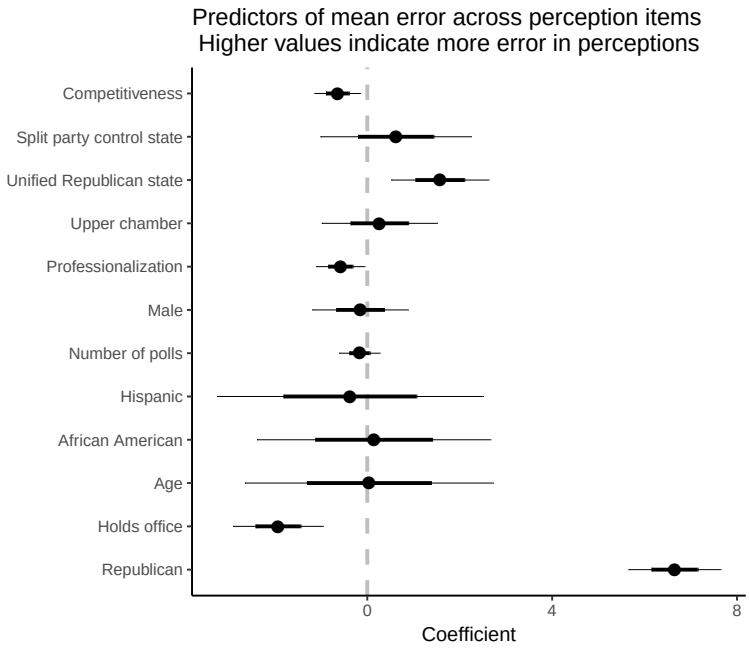
Are the partisan differences in the magnitude of politicians' misperceptions driven by omitted variables that correlate with party, rather than representing true partisan differences in how Democrats and Republcians see their districts? As a reminder, the last columns of Table 3.6 showed that our findings held when we compared pairs of politicians providing their perceptions of the same districts, holding constant any confounders related to districts. With that said, there may be other confoudners related to individuals. To examine these possibilities, we use a multivariate regression to estimate the relationship between the accuracy of politicians' perceptions of public opinion using party and several covariates based on other survey items from the NCS that might be related to the accuracy of their perceptions. The outcome variable is specified as the politicians' mean absolute error, or the mean of the difference between their perceptions and the MRP estimates. The results are summarized in Figure 3.8, in which all variables are scaled to standard deviation one for comparability and higher values for the coefficients reflect more error in perceptions.

We find that errors in perceptions differ in predictable ways, but that by far the largest determinant of misperceptions is that Republicans make much larger errors than Democrats do. Other patterns include that politicians who already held office in 2014 and politicians in competitive elections both have slightly more accurate perceptions.[26] Somewhat surprisingly, politicians who report taking more polls were not significantly less error-prone.[27] The partisan difference remains robust in the presence of these covariates and remains clearly the largest estimate. For example, Republicans' greater inaccuracy is ten times larger than the average effect of being in a district one full standard deviation more competitive.

[26]That politicians who already hold office are more accurate may well be due to selection: presumably individuals who are higher quality and more accurately perceive the public are more likely to win office in the first place. That politicians are more accurate when they are running in competitive elections could reflect their greater incentives to perceive the median voter, or that those in uncompetitive districts may spend comparatively more time with copartisans and primary voters. Politicians running in states where the government was under unified Republican control at the time of the 2014 election were also somewhat less accurate than politicians running in states with split control or unified Democratic control. We find no significant differences between candidates who were running for upper or lower houses of legislatures.

[27]The majority of politicians in the sample reported taking no polls.

Figure 3.8: Predictors of Errors in Perceptions



Notes: All point estimates are coefficients from a linear regression with the outcome as the absolute value of the difference between the MRP estimate of district opinion and the politicians' perception of opinion. Positive point estimates indicator greater error. Competititveness is defined as $-1 * |$`Obama2012` $- 0.5|$ *rescaled to standard deviation one, where* `Obama2012` *is Obama's two-party vote share in the district in 2012.*

Online Appendix A also presents 95% simulation intervals for the size of politicians' errors and their overestimation of conservatism by party; these intervals are similar in width to the 95% confidence intervals of the raw data estimates above.

Potential Mechanism: Partisan Asymmetries in Contact and Activism

What accounts for this partisan asymmetry in misperceptions? As we have discussed, one potential explanation for both parties' misperceptions is that politicians' information environments are not representative of their districts (Fenno 1977; Miller and Stokes 1963). The citizens that legislators and candidates meet are clearly not a representative sample: politicians may more frequently come in contact with constituents who seek out contact with them, those constituents who are identified as persuadable voters, and citizens who are more engaged in their communities.

What kind of citizens do politicians tend to come into contact with? As a proxy for the variety of experiences politicians have where they may ascertain public opinion from who participates in the public sphere, we examine who reaches out to politicians to express their views. Data on contacting state-level politicians are rare, but some surveys have asked citizens about their patterns of contacting Members of Congress. Consistent with other recent work on activism over the last decade (Goss 2008; Schlozman, Verba and Brady 2012; Skocpol and Williamson 2011), these surveys reveal an important asymmetry: Republican citizens are more likely to indicate they have contacted their representatives than Democratic citizens are. In the 2012 ANES, Republicans were 28% more likely to say they had contacted their representatives than Democrats, and in the 2008 CCES Republicans were 39% more likely to have said they contacted their representatives than Democrats.[28] Taking these results at face value, even politicians in districts evenly divided across partisan lines would hear disproportionately often from Republican constituents.[29] For example, contacting behavior among gun owners could help explain why politicians' perceptions on that issue are especially skewed: gun owners are nearly twice as likely to contact elected officials than the general public, whereas gun owners who are members of the NRA are nearly four times as likely to do so.[30]

Not only are Republican citizens more likely to contact their representatives in general, but, as a descriptive matter, Republican citizens reach out to Republican politicians especially often. Table 3.8 shows that, in districts represented by a Democratic Member of Congress (MC), Republicans in the 2008 CCES were about 9% more likely to contact their MC than Democrats. However, in districts with a Republican MC, Republicans were a full 41% more likely to contact their MC than Democrats.[31] Together, Republican citizens' higher probability of contacting politicians in general

[28] Table A.1 reports the point estimates for 2008 and 2012. It also shows that these same divergences did not exist in the Presidential election year ANES surveys taken from 1980 to 1992.

[29] Unfortunately neither the CCES nor ANES asked about how many times an individual contacted their legislators' office.

[30] Pew finds that "Gun owners are more likely than non-gun owners to have ever contacted a public official to express their opinion on gun policy. About one-in-five gun owners (21%) say they have done this, compared with 12% of non-gun owners." See *Pew*, "America's Complex Relationship With Guns." Pew also finds that "46% of gun owners in the NRA say they have contacted a public official to express their opinion on gun policy." See *Pew*, "Among gun owners, NRA members have a unique set of views and experiences."

[31] $\frac{36.4\%-33.3\%}{33.3\%} \approx 9\%$, $\frac{42.9\%-30.4\%}{30.4\%} \approx 41\%$. Our claim here does not depend upon a causal interpretation of

and their especially high likelihood of contacting fellow Republicans suggest two consequences: Democratic politicians should hear from Republican constituents slightly disproportionately and Republican politicians should hear from Republican constituents highly disproportionately. Table 3.9 illustrates this idea. The first row shows that if every citizen had contacted their US House member, the CCES indicates Democratic US House members would receive 36% of their contacts from Republicans while Republican US House members would receive 50% of their contacts from Republicans; 36% of individuals who live in districts a Democrat represents are Republicans and 50% of individuals who live in districts a Republican represents are Republicans. However, the contacting behavior we actually observe is skewed towards Republican constituents. A full 40% of the CCES respondents in Democratic districts who said they contacted their legislator were Republicans, versus 36% in the district at large, indicating a 12% over-representation of Republicans among those who contact Democratic legislators. This disparity is even larger for Republican legislators; 62% of the CCES respondents who said they contacted their legislators were Republicans, even though only 50% of these legislators' districts are Republicans on average, a 22% over-representation.

These patterns suggest a potential mechanism for the partisan asymmetry in conservative misperceptions of public opinion we found in 2012 and 2014: the partisan asymmetry during these years in who reaches out to which politicians. If these patterns were to generalize and politicians were to heavily rely on who contacts them when forming their perceptions of public opinion (Miller and Stokes 1963), then the patterns in Table 3.7 alone would generate the exact patterns of perceptions and misperceptions we found.

this descriptive difference between how Republicans behave in Democratic- and Republican-leaning districts; it may simply be the case that Republicans are especially active in the kinds of districts where Republicans are elected for some other reason than the party of their MC. This would still result in the consequence that Republican legislators hear from Republican citizens especially often. With this said, Broockman and Ryan (2016) find that citizens tend to prefer contacting legislators who share their partisanship and demonstrate this pattern with other forms of evidence as well. It may be that there is a partisan asymmetry in the effects they documented, perhaps because of the greater salience of partisanship as a social identity for Republican citizens. Consistent with a potential causal interpretation of this difference, Online Appendix A conducts a formal regression discontinuity test that suggests at least some of this pattern may be causal. Figure A.4 shows a regression discontinuity plot with the outcome variable as the percent of contacts that come from Republican citizens, and shows that there appears to be a discontinuous jump in this quantity when a Republican just wins office.

Table 3.9: Aggregate consequences of descriptive differences for who Members of Congress hear from.

1

	% of Democrats who contacted MC	% of Republicans who contacted MC
Districts with Democratic MCs	33.3%	36.4%
Districts with Republican MCs	30.4%	42.9%

1

		Democratic US House Members	Republican US House Members
Percent of citizens contacting who are Republicans	Null: if every citizen contacted their legislator	36%	50%
	Observed: among citizens who did contact their legislator	40%	62%
Over-representation of Republicans among citizens who contact legislators		2*12%	2*22%

Source: Author's analysis, 2008 CCES.

The Online Appendix presents additional tests of empirical implications of this mechanism that provide further suggestive support for it. In Table A.1 we find that this partisan difference in contacting did not appear in comparable surveys in previous decades, and Online Appendix **??** shows that the patterns of misperceptions we found do not appear in data on elites' perceptions of public opinion other gathered in 1958, 1992, and 2000—although these earlier studies have significant limitations. Although this historical data is more difficult to interpret, it is reassuring that in historical periods when this mechanism did not appear to operate, its potential consequences do not appear present.[32] In addition, Online Appendix A shows suggestive evidence that in districts and in states where we estimate that the Republican-leaning partisan imbalance in self-reported contacting of legislators is greater, we find that politicians' overestimation of conservatism is also greater.[33]

[32]However, it does appear that there are several "intercept shifts" in how elites perceive opinion during these surveys, consistent with our broader theoretical argument that systematic misperceptions are possible.

[33]Another potential empirical implication of this mechanism is that elected officials, who are receive more contact from the public, would overestimate conservatism especially. Although we see contact as a proxy for a broader suite of participatory behavior in the public sphere that could affect perceptions held by both elected officials and candidates alike, we find some support for this hypothesis. It is the case that politicians are more accurate in general than candidates, although we are not sure how to interpret this difference because politicians and candidates differ

With this said, as with all studies of causal mechanisms, this evidence must be regarded as tentative. First, to be clear, our claim is not that contacts to legislative or campaign offices alone likely explain all of politicians' biased perceptions of public opinion. Rather, we see these questions about contacting behavior as diagnostic of the broader set of activities intended to shape politicians' information environments. Unfortunately, we are not aware of any data on who contacts or otherwise interacts with state legislative politicians, and so we cannot test this argument at the individual level for our elite respondents to examine whether those respondents whose constituencies display this tendency to a greater extent also have the greatest misperceptions. This would represent an ambitious data gathering exercise, and we would urge future research to conduct it. At the very least our research suggests the discipline's surveys should include these questions more regularly. With that said, these patterns are consistent with our broader theory that contemporary American politicians—especially Republicans—work in information environments where conservative views are overrepresented.

DISCUSSION

On a broad set of controversial issues in contemporary American politics, US state political elites in 2012 and 2014 believed that much more of the public in their constituencies preferred conservative policies than actually did. This pattern was present in two surveys of state legislators and candidates. Elites' partisanship was by far the most important determinant for the (in)accuracy of their perceptions: Republicans were prone to severely overestimating support for conservative positions. Democrats' perceptions also typically overestimated the public's

in a host of pre-existing ways, including that they have been selected to some extent on the basis of their ability to perceive what a constituency wants and are likely quality. With this said, we exploit the fact that our data on how patterns of contacting politicians show an interaction of mass and elite party (i.e., that Republican citizens contact Republican politicians especially often). As a result, we would predict a difference in the difference between the accuracy of candidates and officeholders for Republicans and for Democrats. When we tested this prediction, we found evidence for it. Specifically, running a regression of how much each respondent overestimates conservatism on an indicator for holding office, an indicator for party, their interaction, and the same controls as in Figure 3.8 reveals a significant interaction, such that Republicans who hold office on average overestimate conservatism by 2.8 percentage points more than one would expect ($t = 2.02$, $p < 0.05$). That is, Republicans who hold office actually overestimate conservatism by more than one would expect, which would be consistent with Republicans who hold office being subject to particularly strong asymmetric contact from conservative constituents.

support for conservative positions, although by less, suggesting our findings cannot be attributed to motivated reasoning by Republicans alone. These findings suggest that misperceptions of public opinion may be an important dynamic that contributes to dynamics such as asymmetric polarization, pushing Republicans to the right and discouraging Democrats from making a similarly strong move leftward.

Theoretically, we argued that the presence of such large, systematic biases in politicians' perceptions of their geographic constituencies were possible and could contribute to significant biases in democratic representation. Several further testable implications of our argument also find support in our data and others'. First, one implication of our argument is that relatively simple informational interventions would lead to legislative outcomes that are more congruent with public opinion. Indeed, in an ingenious experiment, Butler and Nickerson (2011) find that providing legislators with information about public opinion in their districts causes them to cast more votes that are congruent with their district's median voter. Further field experiments of this type are a natural next step for testing our theory. Our distinctive claim that politicians' errors need not be symmetric and random would predict, at least in 2012 and 2014, that treatment effects in such experiments among Republicans in the US should be especially large—exactly as Butler and Nickerson (2011) find. Further consistent with this expectation, although the observational nature of our data prohibits us from drawing firm causal conclusions, we also find that the politicians with the most severe overestimation of conservatism told us they took the most extremely conservative positions (see Table A.2). A final testable implication of our empirical findings about the contemporary US are that Republican politicians should be more likely to ideologically "overreach," facing larger penalties in general elections for being more extreme, as we expect they are more likely to misperceive the median voter's preferences and thus be more distant from the median to begin with.[34] In a recent article, Hall (2015) finds exactly this heterogeneity in the effects of additional ideological extremism by party (see Hall 2015, Table A.4).

Hall's (2015) result also suggests our findings about partisan differences are unlikely to be

[34]This logic follows from the typical assumption of quadratic utility loss in spatial voting models.

driven entirely by Republican politicians having private information about 'real' opinion not reflected in public opinion surveys, as it appears Republicans are losing votes for taking the increasingly conservative positions they are. Our finding that Democrats and Republicans perceive the same districts differently further reinforces this point; if two politicians perceive the same district differently, they cannot both be right. With this said, electoral incentives are clearly more complex than the simple median voter theorem would imply. More generally, as with any single study, we do not pretend that ours can definitively explain a complex phenomenon like asymmetric polarization in its totality. Rather, our evidence joins other work that tests predictions of significant theories of polarization (e.g., Grossmann and Hopkins 2016; Noel 2012; Thomsen 2014), which can comfortably coexist with and complement our own.

Our findings should open up new research agendas with the potential to deepen our understanding of democratic representation and competition in a variety of ways. For example, our findings that politicians misperceive public opinion could also prove relevant to understanding why politicians appear differentially responsive to different groups within the public. Considerable evidence suggests that American lawmakers are differentially responsive to different groups in the population, including to those high in income (Bartels 2008; Gilens 2012; Gilens and Page 2014; Lax, Phillips and Zelizer 2017), co-partisans, and primary voters (Hill 2017; Kastellec, Lax, Malecki and Phillips 2015). Politicians behave as if these subconstituencies and other issue publics exist (Fenno 1977), and a natural next step for future research would be to measure how politicians perceive the size and composition of such groups. To what extent do legislators consciously respond only to certain parts of their constituencies, or to what extent do they try to represent everyone equally but perceive their district in a biased way?[35] Future work can and should build on ours to answer these questions, which recent advances in estimation of public opinion among subconstituencies should facilitate (Caughey and Warshaw 2016; Kastellec et al. 2015; Lax, Phillips and Zelizer 2017). Future work should also expand the number and type of issues examined, especially to consider more economic issues. It should also seek to query these

[35]For example, one pattern that could drive our findings is if politicians are more likely to bring copartisans to mind when they think about their district as a whole (Miler 2010).

perceptions at the Congressional level, if possible. Members of Congress may well be different due to their differing resources and incentives. Although the presence of asymmetric misperceptions in state legislatures with high professionalism is encouraging, data on Congresspeople themselves would clearly be welcome.

More broadly, reviving a once-widespread interest in how politicians perceive public opinion, our results should also open up a research agenda into better understanding what gives rise to these misperceptions. One possibility our data suggest is that these misperceptions originate from patterns of mass participation in the public sphere; consistent with this, Online Appendix A shows suggestive evidence that politicians overestimated conservatism the most in districts where Republicans were especially likely to contact legislators. However, other dynamics may reinforce these misperceptions as well. For example, party activists are not equally polarized in both parties: Republican party activists harbor more consistently conservative views than do Democratic activists harbor consistently liberal views (Grossmann and Hopkins 2015*b*, 2016; Layman, Carsey, Green, Herrera and Cooperman 2010; Lelkes and Sniderman 2016). If politicians look to copartisans to form their perceptions of their districts, Republican politicians are thus likely to come in contact with an especially polarized group of voters relative to Democrats, potentially distorting Republicans' views of public opinion more generally. Another possibility future research could address is whether politicians more accurately perceive the public at the level of symbolic instead of operational ideology (Grossmann and Hopkins 2016). It also remains to be seen whether 'thermostatic' (Wlezien 1995) responses to unified Republican government under Donald Trump will shift patterns in public participation in a manner that might shift politicians' perceptions of the public, especially on issues where liberals are most vocal—a possibility we readily allow and that could provide additional tests of our theory that mass participation influences politicians' perceptions. We do not expect that the conservative bias we observed in 2012 and 2014 to be a permanent feature of politics (and indeed we show in Online Appendix **??** that these same misperceptions do not appear to have been present in earlier eras, when, potentially relatedly, Democratic and Republican citizens contacted politicians at similar rates; see Table A.1).

Another research agenda our work should open up is understanding the consequences of these misperceptions. Table A.2 finds, unsurprisingly, that even within party politicians who misperceive the public as more conservative by a greater amount are also more conservative in their positions. However, the direction of causality here is obviously unclear. With this said, it is clear how our findings may contribute to a phenomena like asymmetric polarization, which has produced patterns like one Ahler and Broockman (2017) document: on average, Democratic politicians are much more likely to vote congruently with constituent opinion than are Republicans. How these misperceptions will influence policy outcomes is less clear, as politicians are embedded in institutions that constrain their behavior. For example, Hall (2015) finds that when Republican candidates for office take positions farther to the right, policy actually moves *left* as a consequence, because Democrats become so much more likely to win office instead. In some cases, it could even be that elites' conservative misperceptions actually undermine conservative policy goals. Of course, these misperceptions may also contribute to the conservative bias that exists in state policymaking in some domains.[36]

In terms of immediate implications for theories of democratic representation, our findings present a mixed verdict. On the one hand, we found very strong *responsiveness* of politicians' perceptions of public opinion to the reality of that opinion (e.g., Erikson, MacKuen and Stimson 2002)—much stronger than Miller and Stokes (1963). When comparing two districts with differing levels of support for a policy, it is usually the case that the politicians in the more supportive district perceive higher levels of district support than do politicians in the less supportive district.

At the same time, our findings vividly illustrate how this strong responsiveness to public opinion can belie imperfect congruence with it (Achen 1978; Lax and Phillips 2012). Although the correlation between opinion and perception of opinion is strong, we found that it is frequently offset

[36]On issues of gay rights, for example, when it comes to state policies, "most noncongruence is in the conservative direction" (Lax and Phillips 2009*a*, p., 383). The same conservative bias operates on votes on gay rights legislation in Congress, where "74 percent of votes are incongruent in a conservative direction" (Krimmel, Lax and Phillips 2016). Whether these conservative biases are typically present in other domains is less clear. On the issues they examine, Lax and Phillips (2012) find that policies are somewhat more likely to be incongruent in a conservative than a liberal direction on average, but that the best characterization of the evidence is that liberal states are more likely to be incongruent in a liberal direction and conservative states incongruent in a conservative direction.

by an "intercept shift" that leads politicians to misperceive opinion across the board, sometimes dramatically. The result is that policies with majority support in a majority of districts are often seen as having that majority support by only a minority of legislators. These patterns of strong responsiveness yet imperfect congruence are consistent with a more nuanced understanding of how opinion translates into policy than the simple extremes that politicians care only about public opinion or care about it not at all (Lax and Phillips 2012).

With this said, to the extent our findings are relevant to understanding why politicians do not always represent their constituents perfectly, a degree of optimism seems warranted. Politicians' incentives are difficult to change, but their information environments are demonstrably malleable (Bendor and Bullock 2008; Butler and Nickerson 2011). For example, field experiments find that even a few phone calls or emails from constituents can change legislators' votes (Bergan 2009; Bergan and Cole 2015). This suggests that any biases in representation that may result from misperceptions of public opinion could be feasible to correct. Further observation of what happens when politicians are confronted with more reliable information on public opinion (e.g., Butler and Nickerson 2011) could thus prove both substantively impactful and theoretically illuminating.

Chapter 4

How Politicians Connect With, Evaluate and Learn About Their Constituents

In Chapter 3, David Broockman and I showed that state legislative candidates' perceptions of public opinion in their districts show a consistent bias—on average, Republican politicians and party leaders strongly overestimate support for conservative issue positions, while Democrats do not tend to overestimate public support for liberal policies. What accounts for this asymmetric pattern of perceptions? There is no single cause for such a widespread misperception of the political world, but focusing on a variety of aspects of the political system can help clarify why state-level politicians have such biased perceptions of their constituents' opinions.

This chapter examines some possible explanations related to how politicians gather and evaluate information that they use in forming perceptions of their constituents' preferences. It is unreasonable to assume that politicians will have perfect information about where their constituents stand on the issues. Despite their best efforts to learn about their constituents' preferences, politicians still will be subject to the limitations of the information available to them and their own cognitive biases. For a variety of reasons, they may encounter unrepresentative subsets of their constituents, who could shape their perceptions of public opinion. They may consciously or unconsciously follow some constituents more closely than others. Politicians' information processing is subject to the same kinds of biases as many kinds of social perceptions that people from incomplete information. Especially for state and local politicians, accurate and complete information about public opinion in their districts may be hard to acquire. Instead, politicians must use a number of different sources of information, often relying on their impressions of the district

rather than hard data.

Politicians' perceptions are subject to more strategic considerations as well. Politicians may feel that some constituents are less likely to vote or to have stable opinions than others, meaning they are less likely to hold them accountable and jeopardize their re-election chances. State-level politicians face limitations in their ability to conduct high-quality surveys in their districts on specific issues. However, little direct evidence exists on how they do form their judgements of what their constituents want. Fortunately, our surveys provide an opportunity to investigate how politicians collect information by directly asking them about their behavior. Can the activities that politicians undertake lead to the kind of consistent ideological bias in perceptions of public opinion that we find among candidates for state legislative office?

What information do politicians receive about their constituents?

State-level politicians face large information gaps as they seek to learn about their districts. Despite the falling cost of polls over recent decades, state legislators have little access to representative polls of their districts.[1] Instead, politicians must form their perceptions of their constituents' opinions from the evidence they do have, from meeting and talking to constituents, to demographics, to the activities of grassroots groups.

One possible reason why politicians' perceptions do not match true opinion could be that their activities bring them into contact with unrepresentative cross-sections of their districts. Whether they are sitting officeholders or campaigning for the first time, candidates make strategic choices about how they spend their time in the district. These activities and interactions with constituents could fundamentally shape how they think about their constituents and their priorities and preferences. Another possible pathway for politicians to develop a biased perception of their constituents' preferences is if the people who contact them and attempt to influence them are not representative of the district as a whole.

[1]Later in the chapter, I show evidence that the vast majority of state legislative candidates do not conduct polls, and that the ones who do are not always asking questions that would help them understand their constituents' positions on issues, but rather use polls to test messages and conduct horse-race evaluations of their races.

Finally, politicians might feel different incentives to pay attention to or follow the opinions of different people. If they perceive certain groups of citizens as unlikely to vote, they may leave them out of their thinking about what their constituents want. In some cases, I find evidence that politicians' information environments are biased in ways that may lead them to overestimate the conservatism of their districts. However, the evidence is mixed, and it is not clear that all aspects of politicians' information environments about public opinion are biased rightward.

First, I present evidence from candidates' open ended comments on the NCS about the factors that they think affect their perceptions of public opinion. These responses show that the candidates recognize that they have imperfect information about their constituents' opinions. Many of them report that they wish they had access to polls or other more reliable measures of opinion. Others suggest that the constituents they meet or otherwise hear from influence their perceptions of what the whole district thinks. Others try to make sense of public opinion by thinking about various ideological or demographic groups in the electorate. The cognitive schemes they use to overcome this information deficit rely heavily on their perceptions of the district's general ideology and on citizen activism and contact.

Second, I present evidence on how politicians connect with voters during campaigns. Based on closed ended responses from our survey respondents, I show how candidates divide their time during campaigns. Candidates are frequently engaged in activities that might bring them in contact with community activists, who might not be representative of the district as a whole. Candidates' self-reported activities during campaigns are likely to bring them in contact with unrepresentative groups of their constituents, especially those who are most active in organizations. However, there are few significant partisan differences on these measures, suggesting that candidates' activities during campaigns cannot explain the *asymmetric* misperceptions I find among state-level politicians.

Third, I consider how candidates evaluate their constituents' sophistication and likelihood to participate in politics. In a conjoint experiment, I present candidates with profiles of hypothetical constituents and ask them to evaluate the constituents along several dimensions including their

likelihood to vote and pay attention to a legislator's actions in office. Candidates evaluate Republican citizens and citizens with conservative issue positions as more likely to participate in ways that would suggest that the mechanisms of electoral accountability will make officeholders pay attention to and try to learn about those constituents' opinions.

Fourth, I investigate how candidates perceive the partisan and ideological makeup of their districts. In the open-ended comments, some candidates mentioned that they infer their constituents' opinions on specific issues from their perceptions of district ideology. Here, I find slight partisan differences in the extent to which candidates believe voters of each party are likely to vote, possibly explaining some of Republican candidates' overestimation of support for conservative issue positions.

In sum, the evidence from the NCS suggests that state-level politicians form impressionistic evaluations of their constituents' opinions by collecting information through personal contact and heuristic-based perceptions. The candidates show some asymmetric biases in how citizens' ideology influences their assessments of them. Combined with the evidence on contacting in Chapter 4, these results suggest that citizens' participation in the public sphere profoundly shapes what politicians believe about public opinion.

THE INFORMATION ENVIRONMENT FOR STATE-LEVEL POLITICIANS

Many political scientists focus their research on the U.S. Congress and on the presidency. Data about the activities of federal officeholders is relatively easy to access, and almost everyone agrees that the actions of Congress and the federal government are very consequential. In addition, though, many important decisions are made by politicians at the state and local level. Despite the fact that these politicians have similar responsibilities to members of Congress, they work with much more limited resources. They represent many fewer constituents than members of Congress, and for most state legislators, legislating isn't their full-time job. Nevertheless, the state legislatures pass thousands of laws each year that affect the lives of ordinary Americans just as much as federal

laws.

State legislatures vary considerably in their professionalization (Squire 2007). Professionalization encompasses several attributes that determine the resources and responsibilities of state legislators. The states vary considerably in the population of state legislative districts, the length of time that sessions of the legislature typically meet, the amount of staff assigned to each legislator, legislative pay, and other factors. In most states, being a legislator is not a full-time job. Nevertheless, the variation is considerable, from California where highly professionalized legislators represent districts larger than congressional districts, to New Hampshire, where a legislature as large as Congress earns $100 per year for serving tiny districts. Thus, the population of state legislatures offers an opportunity to study a wide variety of American politicians.

Typically, state legislators, even in states with professionalized legislatures, have little access to reliable polling data on their districts. In the 2014 National Candidate Study, I asked candidates about their campaigns' use of polling. A large majority of candidates in the survey reported that their campaign would not use any polls at all. Many state legislators also have minimal electoral competition. The exact figure varies considerably across years and states, but in some years more than half of incumbents do not have a challenger (Rogers 2014*b*). State legislative candidates differ in important ways from congressional candidates, so generalizing from these findings to members of Congress may not be appropriate. Our surveys provide an opportunity to learn about the kinds of information about public opinion that state-level politicians use as they form their perceptions of what their constituents believe about the issues.

WHAT DO THE CANDIDATES SAY SHAPES THEIR PERCEPTIONS?

To begin to examine the processes by which politicians learn about public opinion in their districts, I directly asked the candidates about factors that they feel might influence their perceptions. On the 2016 NCS, I asked candidates an open ended item after asking them to estimate district opinion on a variety of issues. The item asked, "What came to mind as you were answering our questions about

what percent of your district supports various policies?" Of course, this approach has limitations. Self-reports like these are imperfect, as candidates might not answer sincerely or might have incomplete or inaccurate views of their own thought processes. Nevertheless, they offer a starting point for an investigation of how politicians process information about public opinion.

Several themes emerged from responses to this item. First, most candidates stated that their responses were approximations, guesses, or otherwise imprecise. Several of them expressed frustration that they do not have access to more precise polling information.

“I haven’t polled - I do know voter registration and turnout numbers, but I answered based on how many constituents have contacted me on this issues."

“I really could not say for sure. It was simply a wild guess."

“I would prefer quantitative surveys - not just guesses."

Other candidates talked about their perceptions of the district’s general ideological orientation.

“My district is one of the most liberal in my state, and still has plenty of people that don’t support some of the more liberal policies asked about (which I generally support)."

“[State] is a lot more conservative than would be willing to consider the policies that were described."

“This district is a mix of liberal, conservative, and libertarian."

“I was trying to think about what percentage of the district would likely be very conservative...and then subtracting that from 100."

“My district is sharply divided conservative and liberal."

Some candidates mentioned various social or identity groups in their districts, inferring the prevalence of issue preferences from their perceptions of the size of these groups.

“District is about 40-45% Democrat, about 25-30% union affiliated households"

“Very diverse voter base in my district - half are minority communities and the other half are non-minority communities. Generally my district is fairly conservative - more than my personal

beliefs and more than the general population - though largely in line with my state's general worldview."

"The types of policies my district has supported. For instance, many in my district are religious and identify as Christians, however; 71% voted no to the amendment which would have Constitutionally made marriage only between a man and woman. Many of the conservatives are libertarians...they are slightly liberal on social issues, but are conservative socially. The district is evenly split between liberals and conservatives."

"Knowing the make up of the District helps to guess what the percent would probably be. Also living/working/attending church in the same area and in the same state for many years helps know how my district may feel about issues."

"That my constituents are generally more affluent, progressive and want their government to work on those types of issues."

These open ended responses expose the impact of state legislative candidates' limited resources on their ability to accurately perceive their constituents' opinions. No candidate in our sample responded to this item by saying "I take a lot of polls." Instead, candidates talked about their personal observations, about the constituents who seek them out, and about their stereotypes and perceptions of the district along other dimensions. There are three major themes. First, candidates are aware that they have limited information. Second, candidates often use groups to construct their estimates of public opinion, considering how ideological, demographic, or economic groups respond to various policies, then making an estimate of how many people in their districts belong to each of those groups. Third, candidates are subject to pressure from vocal groups or citizens who advocate on issues. The responses show that, at the state legislative level, politicians use heuristics to form their perceptions. They also suggest that contact and interactions with constituents are an important factor in candidate's perceptions.

HOW DO CANDIDATES CONNECT WITH VOTERS?

Politicians, even at local levels of government, maintain intensive schedules of interacting with constituents in their districts. Fenno's (1978) *Home Style* remains the definitive treatment of the subject. Of course, these patterns vary with the level of office. Many state legislators and local officeholders have other jobs that take much of their time. Nevertheless, they still make efforts to appear in their districts and to cultivate a personal vote. These interactions with constituents may play an important role in shaping politicians' perceptions of their constituents' opinions. These decisions about expenditures of time may have consequences for how politicians perform in elections; Miller (2016) finds that challengers who report spending more time on their campaigns fare better in general elections than challengers who spend less time campaigning. This finding, however, does not generalize to incumbents and may reflect the fact that candidates who spend less time are less prepared to win in other ways.

Might candidates have asymmetric misperceptions because Republicans and Democrats are doing different things and meeting different people during their campaigns? On the 2014 National Candidate Study,[2] I asked candidates to report on the activities they do in their campaigns that would bring them into contact with constituents in their districts. I created a list of common activities that candidates might do during the campaign or while in office. Candidates responded to questions about the following list of activities, which I designed to capture a broad set of activities in which candidates might engage and which might bring them into contact with different segments of their constituents. The activities included:

- Take professional polls of the district
- Knock on voters' doors
- Go to community groups like the Rotary Club or Parent-Teacher Groups
- Engage with people on social media like Facebook or Twitter

[2] See Chapter 3 for a discussion of this survey's design and methodology.

- Have campaign or legislative staff talk to constituents
- Read emails and listen to calls from constituents
- Talk to campaign donors

For each activity, candidates were asked the frequency with which they engaged in the activity during their campaign. The frequency measures were:

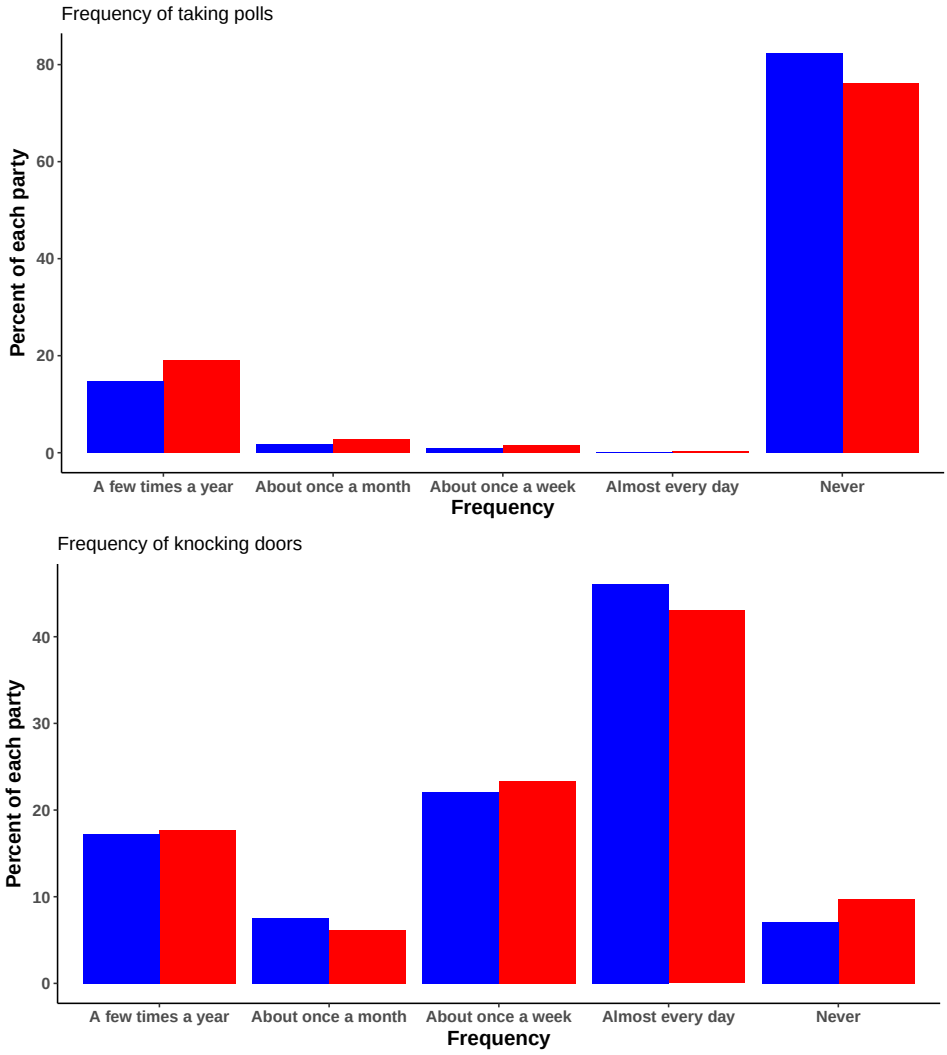
- Almost every day
- About once a week
- About once a month
- A few times a year
- Never

Figure 4.1 plots candidates' responses to each of these items, broken down by percent of each party reporting each frequency category.

Candidates report engaging in direct contact with voters frequently, especially by knocking on doors and talking on the phone. In contrast, candidates spend less time talking to donors. Where staff is available, staff also talk to voters frequently, although more Democrats than Republicans report having staff. The picture that emerges is one in which many candidates are doing their own campaign work personally, and they are encountering constituents in face-to-face settings, often at their doors.

There were no significant partisan differences on any of these items, suggesting that candidates of both parties engage in similar activities during their campaigns. Of course, the candidates surely meet different kinds of people when they engage in the common activities like knocking doors, but different campaign strategies do not seem to be a factor in shaping asymmetric misperceptions, because candidates of both parties are engaging in similar activities.

Figure 4.1: Candidates' responses to questions about the frequency of certain campaign activities.

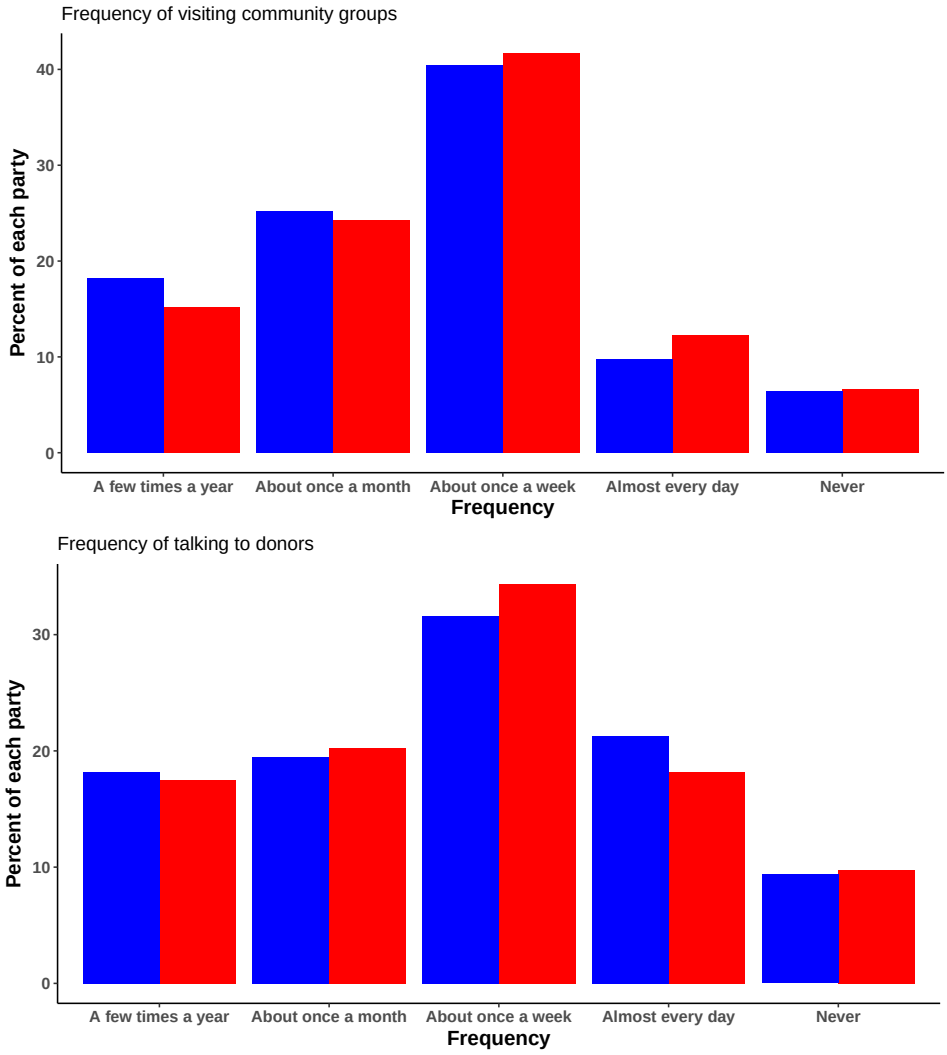


What kind of evidence about public opinion do candidates believe?

I also asked half of the sample (randomly assigned) to evaluate the extent to which each way they come in contact with their constituents gives them a good sense of public opinion in the district. For these accuracy measures, I asked the candidates, "Please rate how much you think each activity would give you a good sense of public opinion in your district:" The response options were:

- Very accurate
- Somewhat accurate

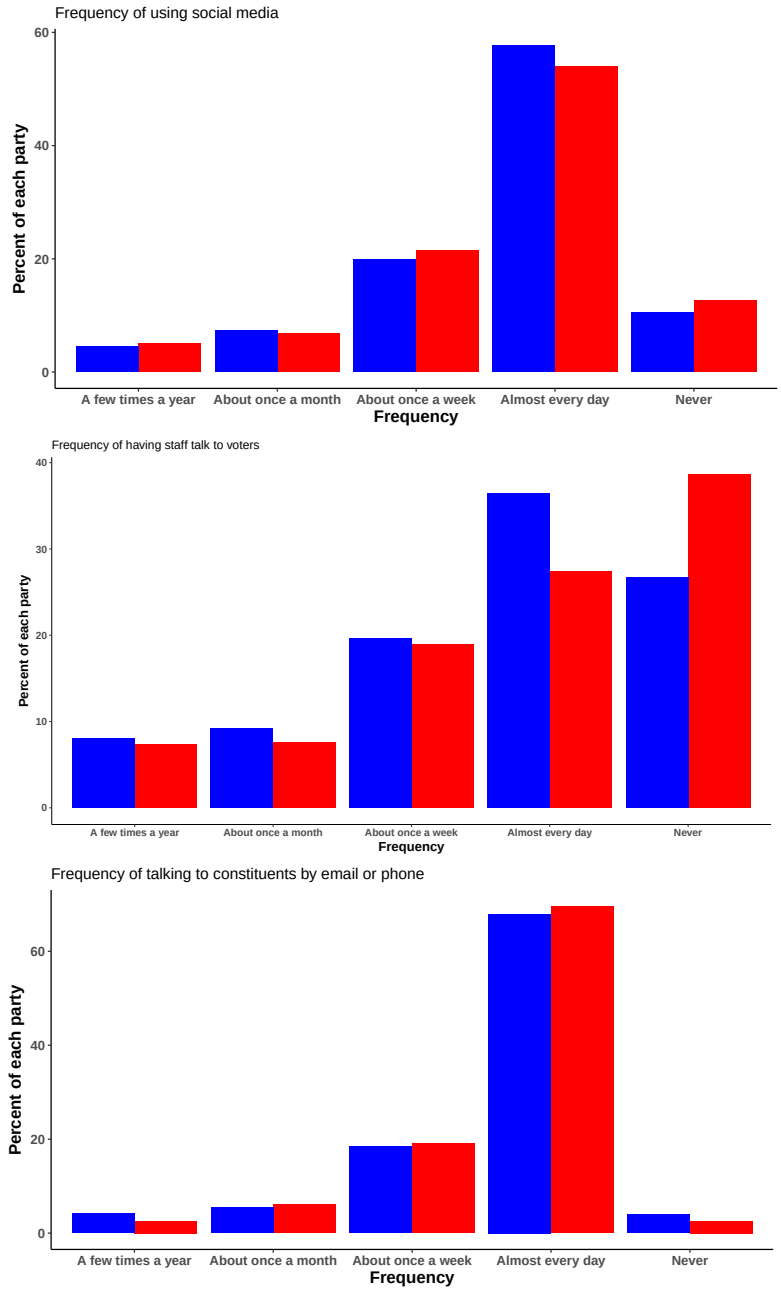
Figure 4.2: Candidates' responses to questions about the frequency of certain campaign activities.



- Not very accurate

Candidates evaluated the accuracy of all of the activities presented above, even the ones in which they said they did not engage. Again, relatively few partisan differences emerge in candidates' responses to these items. The results do not suggest that differences in the kind of evidence that politicians believe about public opinion drive the *asymmetric* misperceptions that I find. In general, candidates seem to evaluate activities that give them direct contact to voters—knocking on doors and answering emails and calls from constituents—as the best ways to get a sense of public opinion in their districts. For other activities, such as engaging on

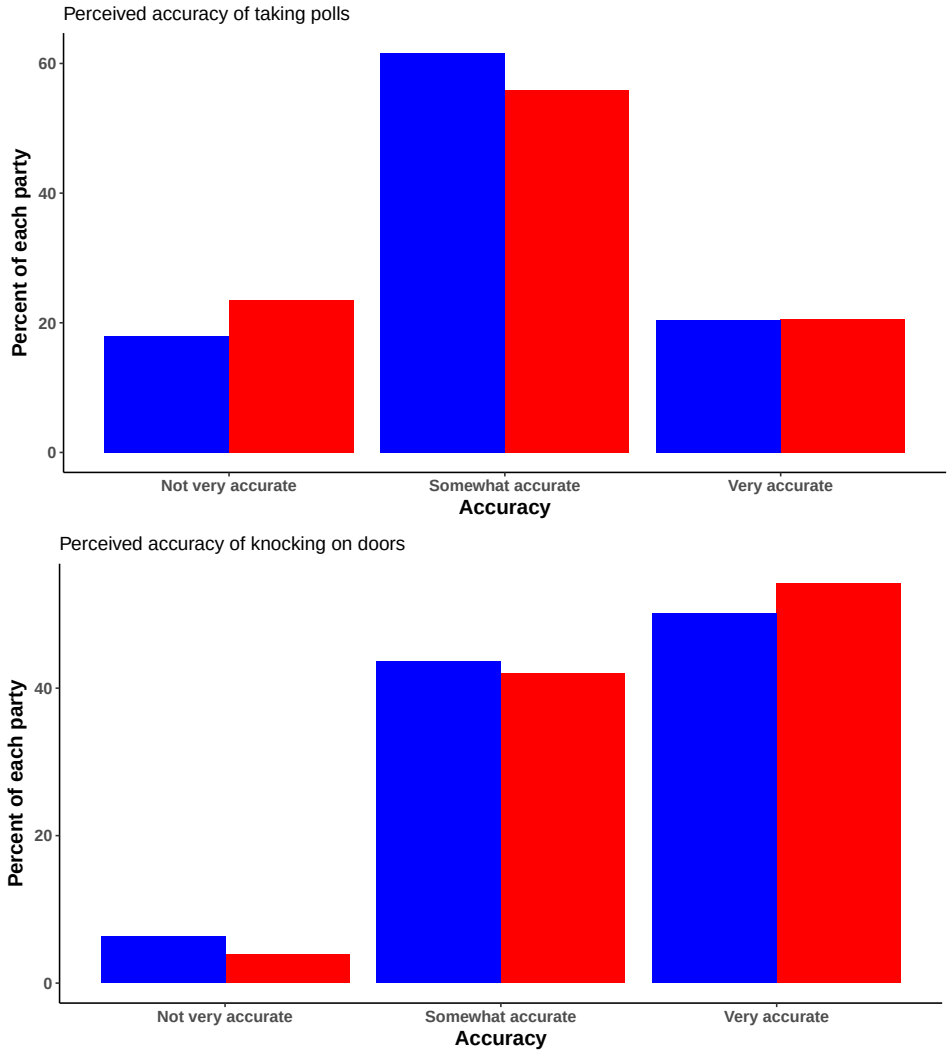
Figure 4.3: Candidates' responses to questions about the frequency of certain campaign activities.



social media or talking to donors, many candidates feel they do not get a good sense of public opinion. Candidates are not especially convinced that polling would give them an accurate sense of their constituents' preferences, as the modal response is only "somewhat accurate." These results suggest that candidates are sometimes, but not always, aware that their information sources are

imperfect. However, again there are no significant partisan differences, indicating that differences in beliefs about information sources are not a likely contributor to asymmetric misperceptions.

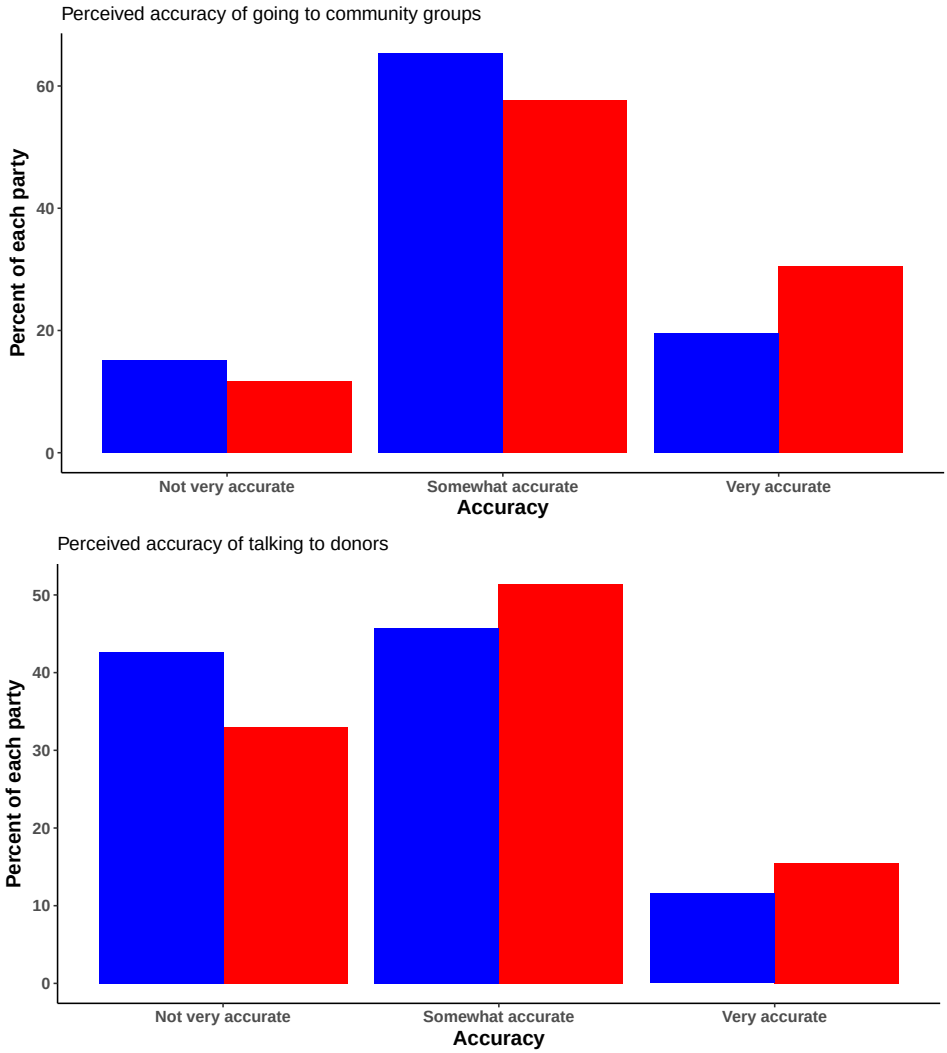
Figure 4.4: Candidates' responses to questions about the accuracy of certain campaign activities.



Candidates' Use of Polls

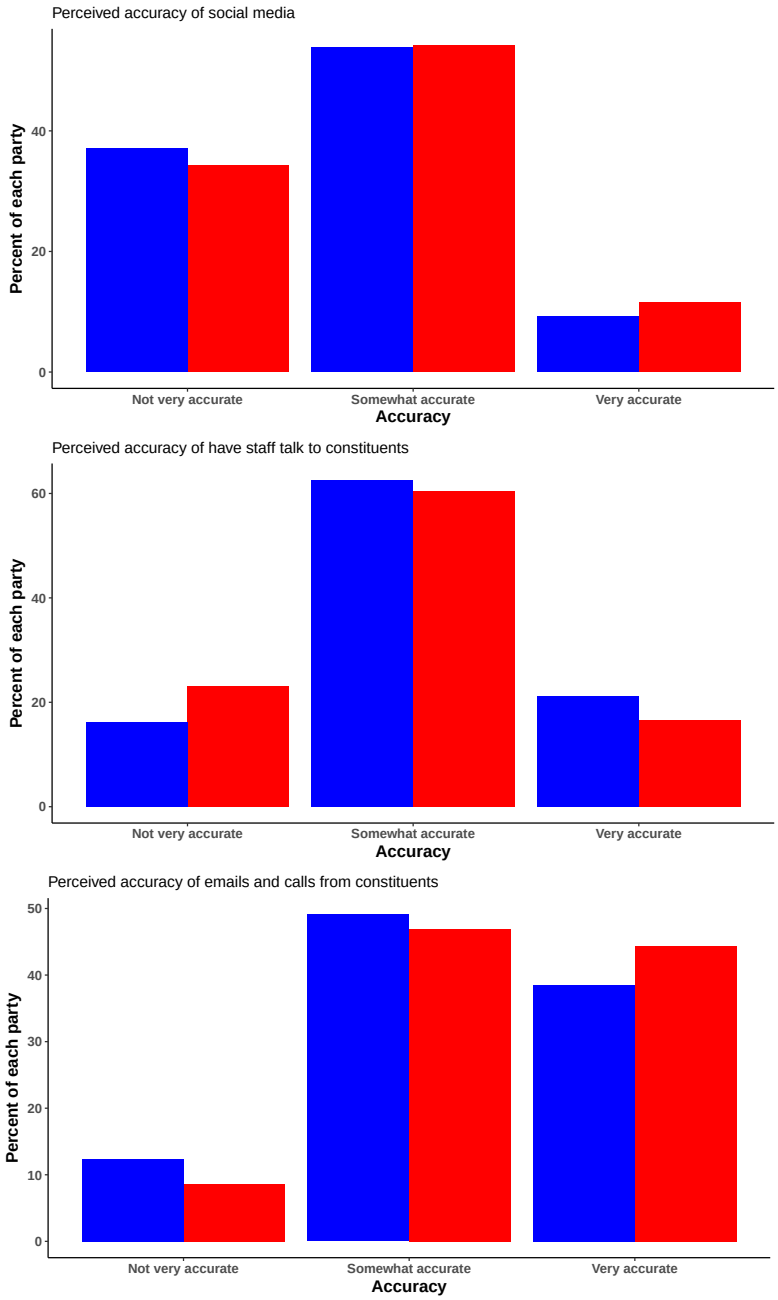
Of course, the most accurate method for a politician to learn about public opinion is to take a scientific survey. However, for the state-level politicians that I study, such surveys are a luxury that they do not typically use. I asked candidates about their campaigns' use of polls and found that very few do. A large majority of candidates in the sample reported that they or their campaigns

Figure 4.5: Candidates' responses to questions about the accuracy of certain campaign activities.



would not take any polls during the election cycle. 80% of the sample either said they would take no polls during the election cycle or left the item blank. (64% explicitly stated they would take zero polls). Simply put, candidates at the state legislative level are not frequently conducting the kinds of surveys that would give them a good sense of where their constituents stand on the issues. Little evidence is available on whether the same is true for members of Congress, although in extensive work done by the Congressional Management Foundation on how congressional staffers make sense of their districts and connect with constituents, issue-specific polls are rarely if ever mentioned.

Figure 4.6: Candidates' responses to questions about the accuracy of certain campaign activities.



EXPERIMENT: HOW DO CANDIDATES EVALUATE THEIR CONSTITUENTS?

Just as voters evaluate their representatives' performance, so too do officeholders evaluate their constituents. Politicians' evaluations of their constituents may center on their likelihood to vote. Because the mechanisms of democratic accountability rely on voters to pay attention to politicians'

activities and to vote accordingly, strategic politicians should pay the most attention to learning the preferences of likely voters and have lesser incentives to respond to the preferences of voters unlikely to hold them accountable in elections.

The idea that politicians might pay closer attention to and better represent the preferences of some subsets of their constituents than to others is not new, but recent work, especially by Butler (2014), has clarified how politicians might respond differently to different kinds of constituents. Butler (2014) shows that politicians react differently to contact from constituents based on the constituents' demographics, their partisanship, and their issue positions. Politicians tend to be more responsive to requests for constituent service when they come from the politician's in-group, as well as when they come from people who are from traditionally privileged groups. If officeholders believe only certain kinds of people are likely to vote or to hold them accountable for their actions in office, their incentives to respond to those people's opinions will be stronger. These re-election incentives are a major part of prominent theories of representation.

To investigate how politicians evaluate their constituents, I included a conjoint experiment in the online version of the 2014 National Candidate Study. Conjoint analysis (Hainmueller, Hopkins and Yamamoto 2014) identifies the average marginal component effects (AMCE) of various attributes of multi-attribute objects. In a typical conjoint design, respondents see two multi-attribute profiles and are asked to select one of them in response to an evaluative task. In the marketing context, respondents often make choices between many such pairs of hypothetical products. On the NCS, I asked candidates to evaluate only one pair of profiles of constituents.

The conjoint experiment was included only on the online version of the NCS, for a sample size of 1,259. 1,175 of these candidates responded to our email solicitations, while 84 went online to take the survey after receiving a mailer. An additional 610 candidates returned paper copies of the survey, which did not include this experiment.

Candidates were asked to evaluate two profiles of hypothetical constituents. The question stem prompted candidates to "imagine that these two people live in your district." Candidates then were shown the profiles of the two constituents. The constituents each had seven attributes,

as summarized in Table 4.1. The constituent's name implied his or her gender. The first profile, "Person A," was always 43 years old, and the second profile, "Person B," was always 47 years old. Each constituent had an occupation, reflecting a mix of white-collar and working class occupations. In the analyses that follow, I combine the occupations into three categories: working-class includes construction workers, receptionists, and restaurant servers, service-oriented white-collar includes social workers and teachers, and white-collar professionals include lawyers and small business owners. Each constituent was labeled as either a Democrat or a Republican, and each had two issue positions, on same-sex marriage and the size of government. This design allows me to capture the independent effects of citizens' partisanship and their issue preferences, which are highly correlated in practice but might play different roles in politicians' evaluations of citizens. Finally, each profile had a community involvement, although "none" was one of the four possible options. This attribute was partially included to round out the profiles for realism, but also to determine how evidence of the citizen's social capital and civic skills impacted candidates' evaluations of them. The attributes were fully randomized within profiles, with the exception that the two profiles had different sets of names to ensure that no pair of constituents had the same name.

The candidates made four selections from the same set of two profiles. They were asked to choose which of the two constituents they thought would be more likely to "turn out to vote in November," which would be more likely to "support you," which would be more likely to "have well reasoned positions on the issues," and which would be more likely to "pay attention to how you vote in the legislature." These questions were designed to elicit several possible mechanisms that could influence the candidates' evaluations of the profiles.

Results: Conjoint experiment

Candidates show a bias toward constituents who share their partisanship and issue positions. Candidates are more likely to report that a constituent seems attentive and politically sophisticated if he or she agrees with them. This finding echoes Butler and Dynes's (2016) findings on "disagreement discounting," the idea that politicians discount the opinion of those with whom they

Table 4.1: Attributes of the constituent profiles presented in the conjoint experiment. Attributes other than age were fully randomized, although no pair of constituents had the same name.

Name (implies gender)	Profile 1: Alexander, Alexandra, Donald, Donna, Nathan, Natalie. Profile 2: Daniel, Danielle, Nicholas, Nicole, Samuel, Samantha
Age	Profile 1: 43, Profile 2: 47
Occupation	Construction worker, Lawyer, Receptionist, Restaurant sever, Small business owner, Social worker, Teacher
Party	Democrat, Republican
Issue position 1	Opposes cutting taxes and government services, Supports cutting taxes and government services
Issue position 2	Supports same-sex marriage, Opposes same-sex marriage
Community involvement	Active with a church, Active with a Parent-Teacher Organization, Active with a Rotary Club, None

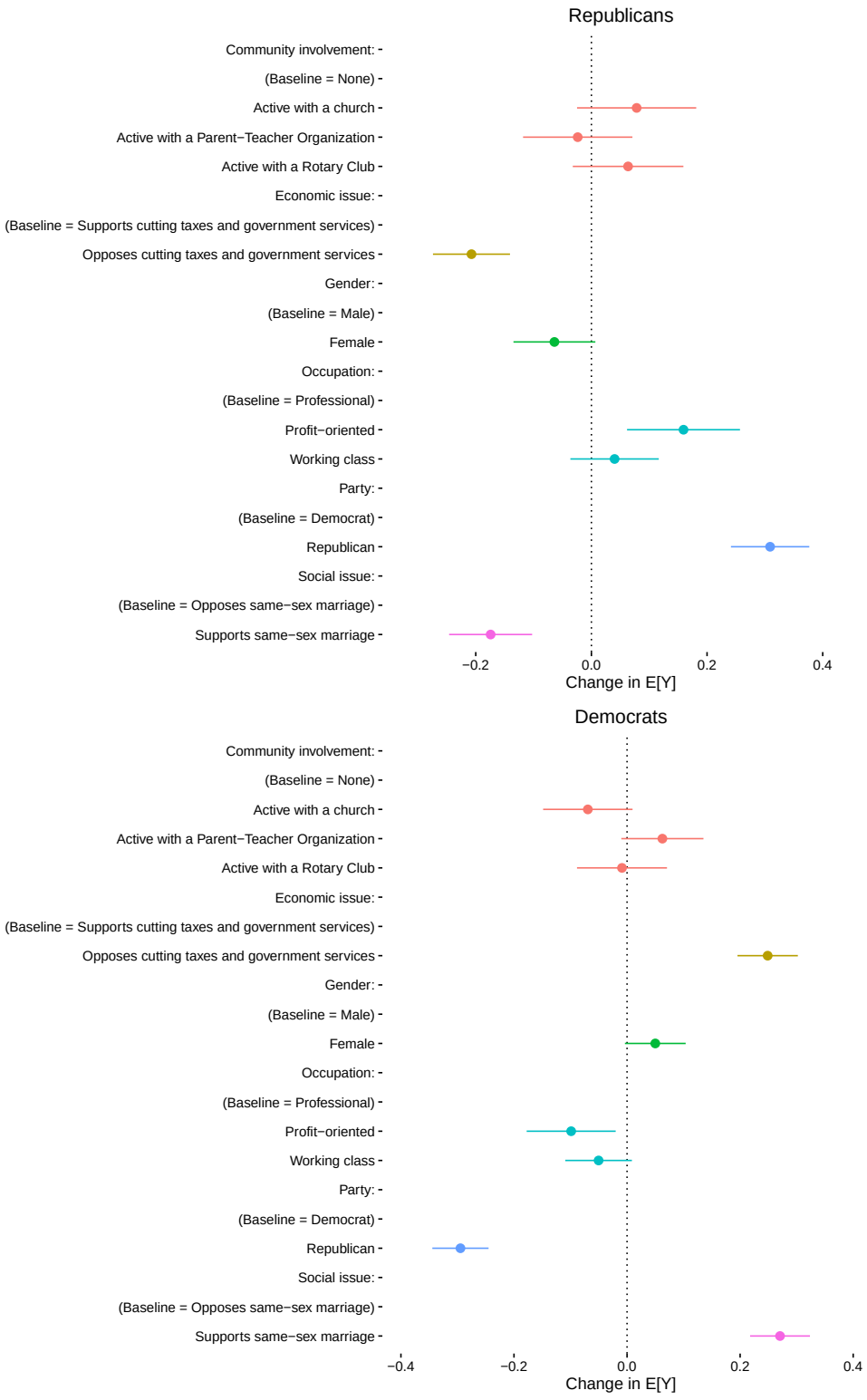
disagree, justifying that disagreement by perceiving constituents who disagree as less informed.

The first outcome, asking which person would be more likely to support the candidate, captures the attributes of constituents that candidates think will lead them to support them. The results are summarized by Figure 4.7. The top panel reflects responses from Republican candidates, while the bottom panel reflects responses from Democratic candidates.

Unsurprisingly, candidates view constituents who share their partisanship as much more likely to support them. In addition, holding issue positions that reflect the party's preferences have large, positive effects on the likelihood that a candidate will perceive a voter as supporting him or her. Despite the traditional association of working-class occupations with the Democratic party, Democrats did not perceive people with working-class occupations as more likely to support them.

The second outcome asked which constituent would be more likely to turn out in the general election. While politicians may feel a duty to represent all citizens regardless of their propensity to vote, a re-election-minded politician should strategically focus his appeals to those citizens most

Figure 4.7: “Which person is more likely to support you?



likely to vote. The results for this outcome are summarized in Figure 4.8.

The most striking finding of this outcome is that candidates from both parties believe that Republicans are more likely to turn out than Democrats are. Republicans believe that, independent of issue positions, Republicans are 20 percentage points more likely to turn out than Democrats are. Democrats share this belief, although at a smaller magnitude.

Independent of citizens' party, Republican candidates believe that citizens who hold liberal positions on size of government and same-sex marriage are less likely to turn out to vote. Democrats' evaluations of the likelihood of someone voting does not seem to be associated strongly with that person's issue positions. As we might expect, all forms of civic involvement make candidates evaluate citizens as more likely to turn out than a baseline of no civic involvement.

The third outcome captures candidates' perceptions of constituents' political sophistication, asking which of the two constituents would be more likely "to have well-reasoned positions on the issues." By asking politicians to evaluate hypothetical emails from constituents, Butler and Dynes (2016) finds that politicians tend to discount the sophistication of citizens who disagree with them on policies. They may be prone to ignoring these citizens' opinions, believing them to be inconsequential or ill-advised.

In this case, I find a more symmetric partisan bias in how candidates evaluate their constituents. Candidates believe that their copartisans have more reasoned opinions than people from the other party. The effect of having the issue positions typically associated with the party seems similar and strong. Politicians from both parties are strongly biased against citizens with working class occupations.

The final outcome addresses candidates' perceptions of the constituents' attentiveness to their actions in office, asking which constituent would be more likely "to pay attention to how you vote in the legislature." This captures an important part of the mechanism of responsiveness, whereby voters' ability to hold politicians electorally accountable rests on whether they pay attention to or learn about legislators' actions. A strategic politician should be most responsive to voters he

Figure 4.8: “Which person is more likely to turn out to vote in November?"

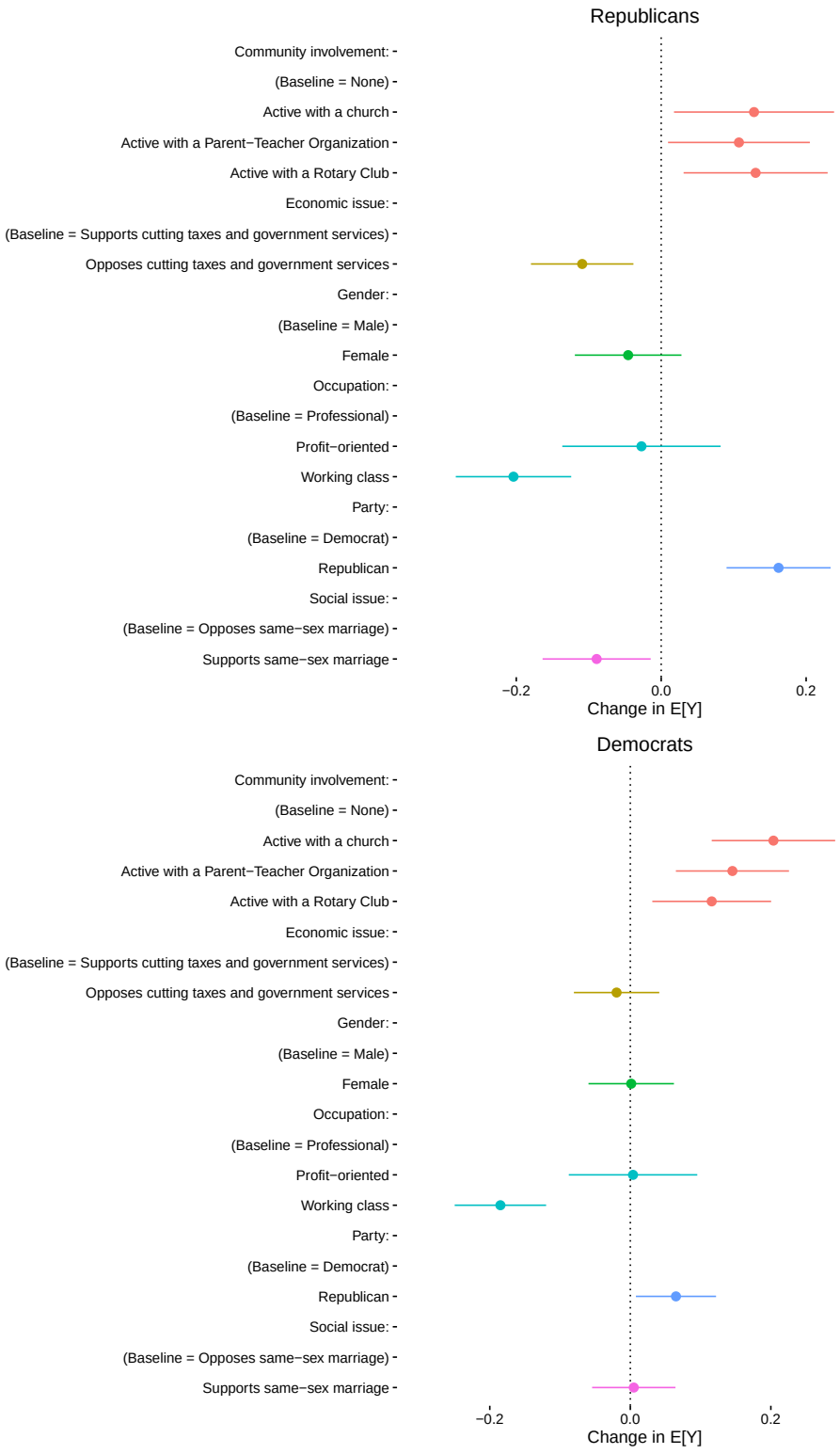
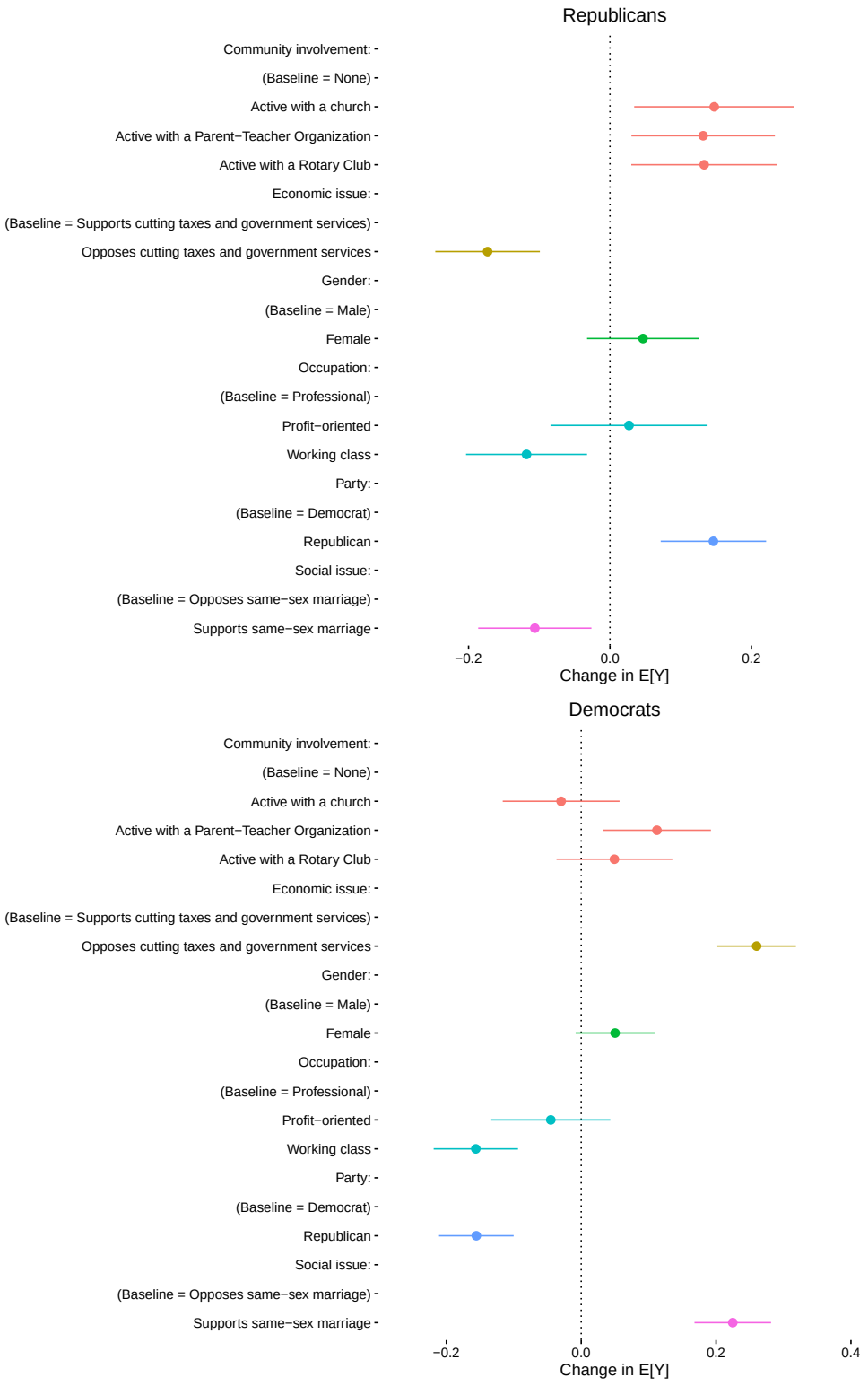


Figure 4.9: “Which person is more likely to have reasoned positions on the issues?"



believes are paying attention to his actions in office; conversely, if he perceives that a group of voters is not paying attention to his actions, he may feel more free to pursue his personal goals at the expense of those constituents' preferences (to the extent that they diverge).

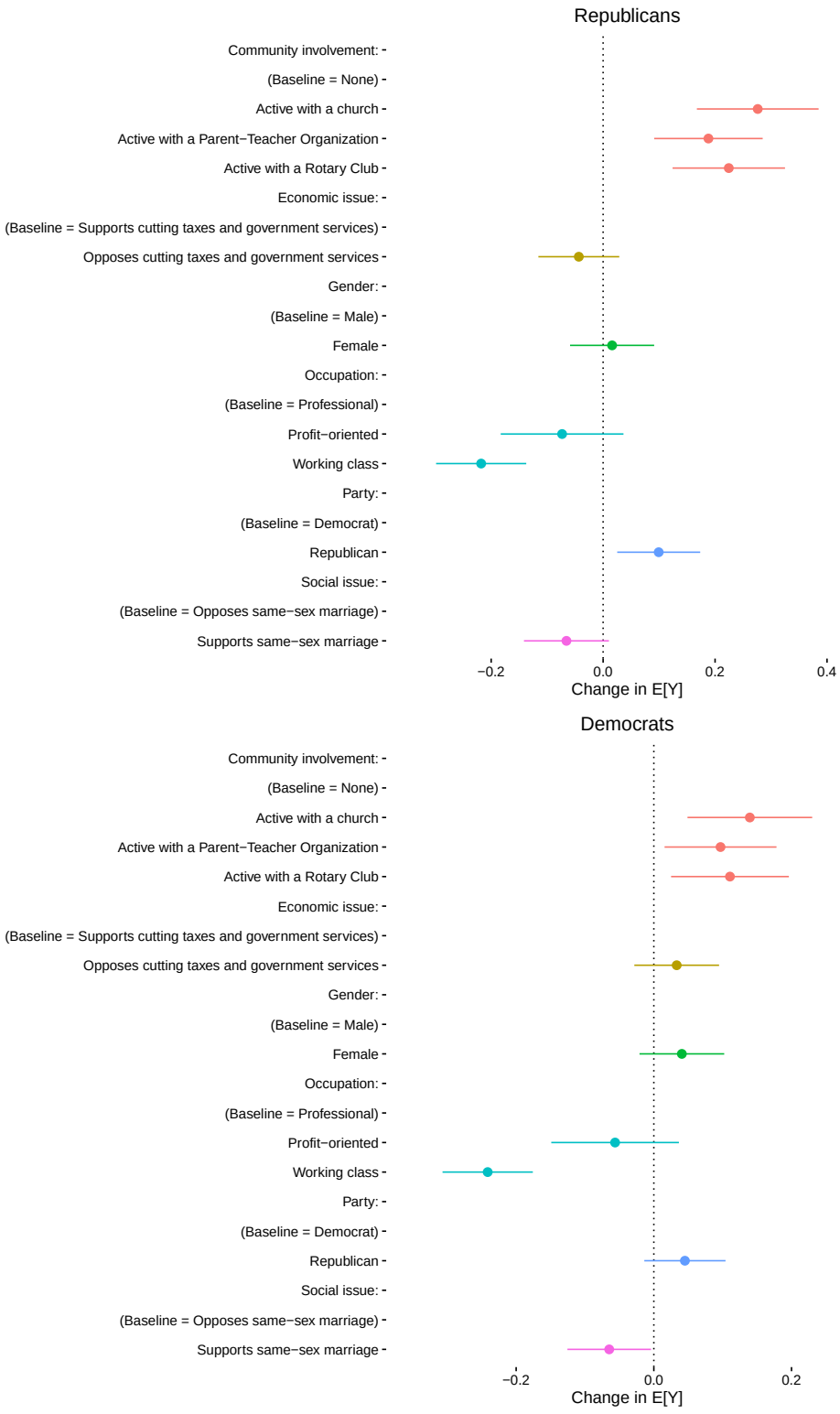
Again, there is an asymmetric bias in candidates' evaluations of their constituents' attentiveness—Republicans believe that their copartisans are more likely to pay attention to their actions in office. Democrats also agree that Republicans are more likely to pay attention, although this effect is not statistically significant. The asymmetry of these perceptions track the asymmetry of the candidates' perceptions of public opinion well, as Republicans show a favorable bias toward Republican and conservative citizens that Democrats do not. This evidence is by no means definitive, but it is suggestive that Republican state legislative candidates evaluate conservatives as more likely to participate in politics and to hold them accountable in office. Democratic leaders do not show a similar bias, failing to evaluate Democratic and liberal citizens as more attentive or participatory. Taken together with the findings on citizens' contacting behavior and politicians' perceptions of public opinion, these results suggest that conservatives' efforts to mobilize the grassroots have had important consequences for how political elites understand the balance of support in their districts.

COMMON HEURISTICS: PERCEPTIONS OF IDEOLOGY AND PARTISANSHIP

Candidates' perceptions of the partisan makeup of their districts

Some candidates mentioned in their open ended comments that their perceptions of public opinion are sometimes shaped by their perceptions of the partisan makeup of their districts, implying that they map from partisanship to opinions. If the candidates do map from their perceptions of partisanship to perceptions of issue positions, one of two possible mechanisms could explain their misperceptions of public opinion. First, candidates could accurately perceive the partisan makeup of their districts, but they could inaccurately map from partisanship to issue position by under- or over-estimating agreement with certain policies among each party. Alternatively, they

Figure 4.10: “Which person is most likely to pay attention to how you vote in the legislature?"



could misperceive their district's partisan makeup but accurately map from partisanship to issue positions. Of course, some combination of the the two could also take place.

There are several reasons to expect candidates to be more accurate about these totals than about issue-specific public opinion in their districts. They can look up (or receive from their party) information on past election results that allow them to judge the expected partisanship of their districts. In many states, candidates can use party registration in the voter file to estimate the partisan makeup of their constituents. Some states, however, do not have partisan-identified registration, making it trickier for politicians to evaluate district partisanship. Candidates may frequently use perceived district partisanship as a heuristic that helps them estimate public opinion on specific issues. However, this heuristic-based reasoning provides two major pathways by which candidates could develop biased perceptions of public opinion. First, their heuristics could be flawed, and they could misunderstand the partisan balance of their constituents. Second, they could misperceive how partisanship predicts opinion on specific issues.

To measure candidates' perceptions of their districts' partisanship, I asked candidates on the 2014 NCS a randomly assigned two of these four items:

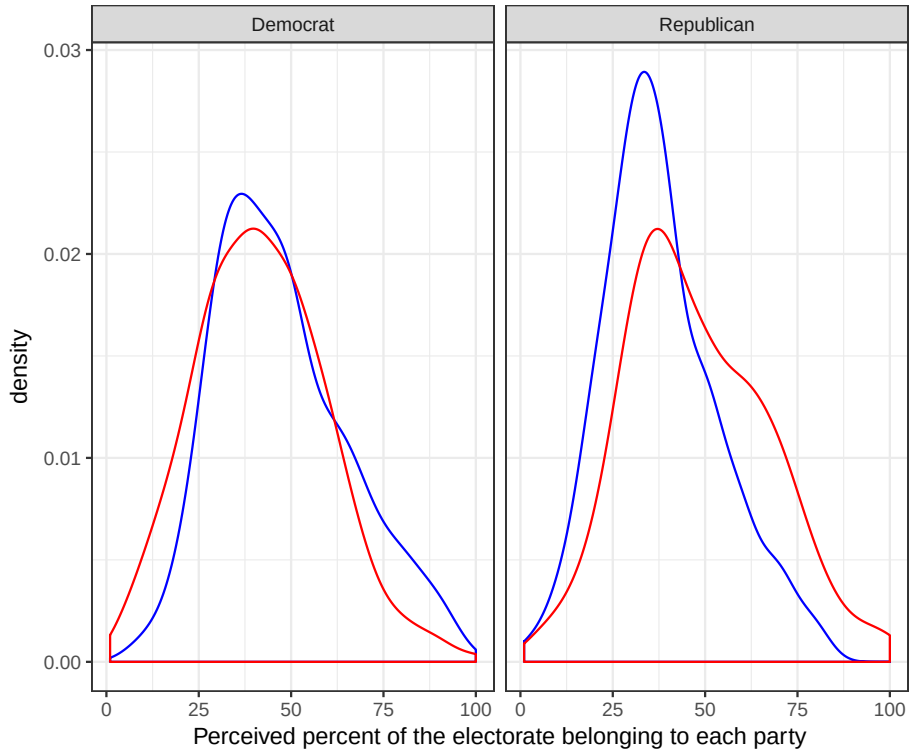
- What percent of the people who live in your district would you guess consider themselves Democrats?
- What percent of the people who live in your district would you guess consider themselves Republicans?
- What percent of the people who will vote in your race would you guess consider themselves Democrats?
- What percent of the people who will vote in your race would you guess consider themselves Republicans?

Because of the randomization, sample sizes for each pairwise comparison are somewhat small. However, we can still use these subsamples to make some inferences about state legislative

candidates' beliefs about their districts and about likely voters.

What do candidates believe about the partisan make up of their districts? Accurately estimating partisanship at the state legislative district level is difficult. However, Figure 4.11 plots the candidates' estimates of their perceptions of what percent of the electorate belongs to each party. As shown in Figure 3.1, districts represented by NCS respondents are approximately representative of the broader population of districts, even when broken down by partisanship. However, Figure 4.11 shows that, while Democrats do not seem to be biased in their perceptions of district partisanship, Republicans show a bias toward overestimating Republican share and underestimating Democratic share. This asymmetry could drive some of the candidates' asymmetric misperceptions of issue-specific public opinion. Republican candidates perceive a more Republican electorate than Democratic candidates do.

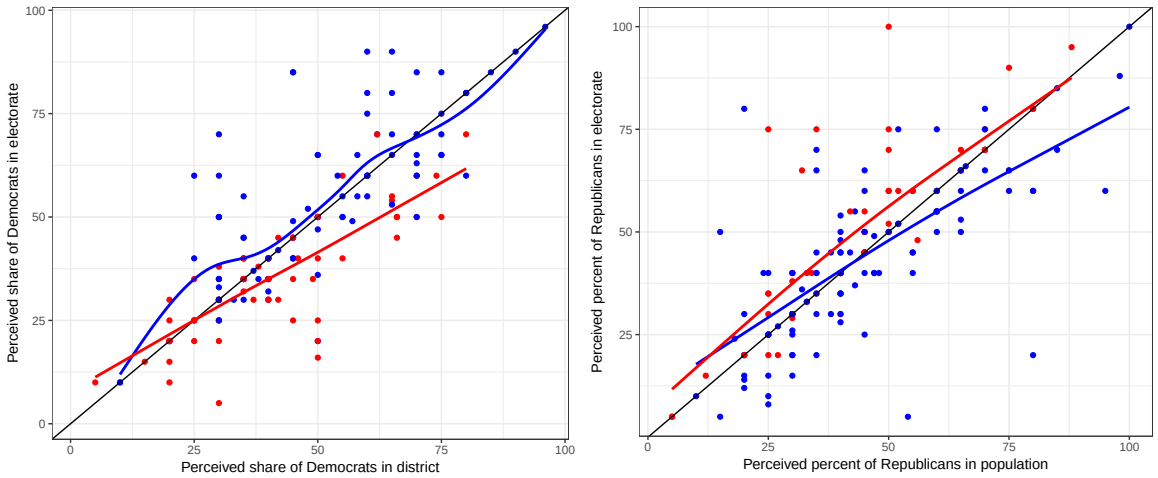
Figure 4.11: Candidates' perceptions of the percent of likely voters in their race that identify with each party.



Left panel: Democratic candidates' perceptions of percent Republican (red) and Democratic (blue). Right panel: Republican candidates' perceptions.

Do politicians believe the population of voters differs considerably from the population of adults living in the district? If politicians believe that voters are more liberal or conservative than the rest of the population, they may pay closer attention to these perceived likely voters, potentially influencing their perceptions of public opinion.

Figure 4.12: Candidates' perceptions of the percent of district population and district voters that identify with each party.



Left panel: perception of Democratic share of district population and voters. Right panel: perception of Republican share of district population and voters. Colors reflect partisanship of candidates responding.

The left panel of Figure 4.12 plots the relationship between candidates' perceptions of the percentage of Democrats in the population and in the electorate. The right panel does the same for perceptions of Republicans. The points and trend lines are colored by the party of the candidates responding to the survey item. All four loess smoothers are close to the 45-degree trend line, indicating that, on average, candidates do not perceive large differences in the composition of the electorate and the general population. However, Democratic candidates are much more likely than Republicans to say that more of their voters are Democrats than the people living in their districts. the results for Republicans are more mixed, but it seems that Republicans are more likely to estimate that Republicans vote at high rates, while Democrats perceive Republicans as voting at lower rates. This pattern is suggestive of some false consensus bias in politicians' thinking about who votes, but it is far from definitive.

DISCUSSION

How do American politicians come to understand their constituents' preferences and translate them into actions in office? The ways politicians collect information about their constituents and form their perceptions of the district are central to their representational role, but these patterns are poorly understood because of limited opportunities to conduct research on politicians' activities and beliefs. In this chapter, I clarified how state-level politicians form their perceptions of public opinion. During their campaigns, state-level candidates engage most frequently in activities like knocking doors, which will bring them in contact with potentially unrepresentative groups of their constituents. However, there are not significant partisan differences on these items, indicating that it is unlikely that *asymmetric* misperceptions in perceptions of public opinion are the result of simply how candidates spend their time. However, I did find evidence that the resource limitations of state legislative candidates gives them the potential to come into contact with unrepresentative groups of their constituents. In addition to these potentially biased information sources, there is some evidence that candidates asymmetrically evaluate their constituents' political sophistication and likelihood of holding them accountable in office, with Republican candidates viewing their copartisans more favorably than Democrats do theirs.

In sum, the evidence from these studies does not identify a definitive cause for state legislative candidates' asymmetric misperceptions of public opinion, but It begins to illuminate the role of information and perceptual biases in shaping what politicians believe about their constituents. These results also begin to point toward more productive areas for further inquiry into the mechanisms behind elite's asymmetric misperceptions of public opinion. The results on contacting in Chapter 3 suggest that further analysis of inequities in grassroots organization and participation merit further inquiry, and the results from the conjoint experiment in this chapter suggest that candidate's evaluations of their constituents' sophistication may be asymmetric.

Chapter 5

How Party Leaders Perceive Public Opinion and the Connection to Candidate Recruitment, Coauthored with David E. Broockman, Nicholas Carnes, and Melody Crowder-Meyer.

Candidates running for state legislative office have important strategic concerns regarding the positions they take. So too do other kinds of politicians, like the leaders of political parties, who must recruit candidates who will win elections and carry out the party's goals in office. Parties are organized to get their preferred candidates elected, so their goals and incentives are not so different from the candidates who are actually running. Party leadership shapes the party's goals and sets strategies to achieve them. Because winning elections is often a central goal for party leaders, they have incentives to pay attention to and accurately perceive public opinion. In this chapter, drawing on collaborative work with David E. Broockman, Melody Crowder-Meyer, and Nicholas Carnes, I investigate county party leaders' perceptions of public opinion. I find that they share the pattern of asymmetric misperceptions that characterizes state legislative candidates' perceptions of public opinion. We connect these patterns to another asymmetry: Republican party leaders prefer to nominate ideologically extreme candidates and believe they are more likely to win elections than moderates. Democratic county party chairs, on the other hand, prefer to nominate centrists. We connect these perceptions to our findings about candidate recruitment preferences and to asymmetric polarization.

Over the last fifty years, centrist candidates and officeholders have virtually disappeared from American politics. Nearly all the candidates parties nominate for office today are more

extreme than their predecessors were, producing polarization, generating gridlock, and dismaying voters (McCarty, Poole and Rosenthal 2006; Lee 2009; Theriault 2006). Over the same period, the influence formal political party leaders wield over who their parties nominate has declined; outside groups like the Koch network now dominate many primary elections (Skocpol and Hertel-Fernandez 2016).

Recently, a number of scholars have suspected that these two trends are related, with the disappearance of centrist candidates stemming in part from the declining influence party leaders[1] have on who their parties nominate (e.g., Persily 2014, 2015; McCarty 2015*a*). This suspicion arises from the observation that political parties are "the sole political organizations whose primary goal is to win [general] elections" (La Raja and Schaffner 2015; Hassell 2016*a*). Because evidence from political science finds that parties are significantly more likely to win general elections when they nominate centrists (e.g., Hall 2015; Jacobson 2011), many expect party leaders to be especially strong advocates for nominating centrists. This line of reasoning suggests a rare policy remedy that could decrease elite polarization: "perhaps...we should be enhancing the role of parties" and their leaders in primary elections through a variety of reforms to elections and campaign finance (McCarty 2015*a*, p. 143) – a line of reasoning influencing public debate and the direction of electoral reform (Edsall 2014). However, this is by no means a consensus: others depict political party leaders as proponents of extremist candidates and would caution against further empowering them (e.g., Hacker and Pierson 2005).

In this paper we make two contributions to this debate. First, empirically, we provide some of the first data about how *local* party leaders seek to influence primaries. Many of the policies to empower national and state party leaders reformers have considered would also increase the already-considerable influence local political party leaders wield in primaries, but existing data largely focuses on national and state party leaders alone. Second, theoretically, we open the black box of party leaders' judgments in primary elections, considering how local party leaders

[1]For the sake of concision, throughout the paper we use "party leaders" to refer to people who have formal elected or appointed positions in the parties' organizational structures. Other work persuasively argues informal party leaders are significant for a variety of outcomes, but they are outside of our focus.

subjectively perceive their incentives to nominate centrists and how such perceptions might differ by party. Party leaders' belief that nominating centrists will help their parties win general elections is the key mechanism expected to lead them to favor nominating centrists. Existing literature often takes it for granted that national and state party leaders hold this belief, perhaps because it is conventional wisdom among political scientists (e.g., Canes-Wrone, Brady and Cogan 2002; Downs 1957; Hall 2015). However, we argue that there are good theoretical reasons to expect many *local* party leaders to believe extremist candidates are more appealing to the general electorate than political scientists do. For example, over the last several decades, local party elites in both parties – and especially Republicans – have been surrounded by ideological activists who have sought to alter local elites' perceptions of what the general public wants and to convince elites that pursuing extreme policies will 'fire up the base' of polarized activists to turn out in general elections (e.g., Grossmann and Hopkins 2016; Hacker and Pierson 2015; Skocpol and Williamson 2011). In some cases, these activists have even worked to install themselves as local party leaders (Fiorina, Abrams and Pope 2005); Persily (2014) thus notes reason to "fear...political capture [of parties] by the extremes" (see also La Raja and Schaffner 2015, p. 22). As a result of these efforts and other changes, local party leaders may not perceive large incentives to nominate centrists or might even see extremists' positions as more popular, undermining the theoretical logic that would lead them to prefer nominating centrists in the same manner their state and national counterparts appear to.

This paper presents several studies consistent with this theory, supported by original data we collected that provides an unusual glimpse at how local political party leaders navigate the strategic calculus of who to back for their party's nomination. In particular, we compiled contact information for and conducted a survey of county party leaders, who we believe represented a reasonable proving ground for our ideas: they are extremely active in primary elections at the local, county, state, and federal levels (Crowder-Meyer 2011; La Raja and Schaffner 2015).[2] Our survey of this

[2]For example, 78% of these leaders indicate supporting candidates in contested open primaries and 57% of candidates for state legislative office (the level of office most empirical work in this literature considers, e.g., La Raja and Schaffner 2015; Masket 2007) indicate such leaders were important in encouraging their candidacy.

group achieved an 18% response rate and a representative sample.

We find that many local party leaders believe the general electorate prefers extremist candidates and their party's positions to a much greater extent than political science evidence suggests, undermining the key mechanism that would lead them to favor nominating centrists. As a result, they tend to favor nominating extremists over centrists, sometimes overwhelmingly. We show this pattern in three methodologically distinct studies.

In our first study, we presented these local party leaders with conjoint experiments (Hainmueller, Hopkins and Yamamoto 2014) that showed them potential candidates for their party's nomination whose traits, including ideology, we experimentally varied. We then asked party leaders which candidates they would encourage to run for their party's nomination (their strategic choices), which candidates they thought would be more likely to win if nominated (measuring perceived electoral incentives), and which candidates would be more likely to remain loyal to the party's policies (measuring perceived ideological incentives). Local leaders in both parties preferred nominating candidates who are even more extreme and polarized than their party is today. Intriguingly, and consistent with our theory, party leaders appear to favor nominating extremists because they do not believe their party will face a significant electoral penalty for nominating an extremist.

This first study also uncovered a stark partisan difference: Republican local party leaders in particular preferred extremist nominees over centrists overwhelmingly. When faced with a choice between a candidate more extreme than their party or less extreme, Republicans preferred nominating the extreme candidate overwhelmingly, by a 10 to 1 margin. This strong preference for extremists appears to arise from Republican leaders' belief that extremists are actually much *more* electable than centrists in general elections. We call this phenomenon among Republican leaders the belief that they "can have their cake and eat it, too": nominating extremists, they believe, provides both ideological and electoral rewards. Democrats, by contrast, do perceive the tradeoff political scientists have identified between party loyalty and electability, believing that extremist nominees are slightly less likely to win general elections. But because they believe the penalty for

extremism is only slight, Democrats still prefer nominating extremists on average, although not nearly as overwhelmingly as Republicans. These results are robust: they hold even for the party leaders in our sample who regularly face close general elections and work in closely divided areas.

To corroborate our finding that local Republican party leaders believe the general electorate is more conservative than many political scientists expect, we conducted a second study where we elicited party leaders' beliefs about public opinion on a number of issues. Consistent with our findings and broader theory, we find that local Republican party leaders perceive public opinion on a number of issues as significantly more conservative than public opinion data indicates that it is. As a result, local Republican party leaders think nominating extreme candidates brings electoral rewards. We show this result using two different methodological approaches and that it is robust to whether we examine public opinion among voters only.

To check the external validity of our findings, our third study examines what party leaders spontaneously say about the traits they look for in candidates for their party's nomination. One concern with our first two studies is that they prompt party leaders to think about policy and ideology, which might lead them to place more weight on those concerns than they normally would. However, we find that party leaders often mention candidate ideology spontaneously. Moreover, local Republican party leaders are especially likely to say that they look for conservative candidates: even when unprompted to consider ideology, Republican leaders mention it as an ideal nominee trait twice as often as Democrats and over six times more often than they mention ideological centrism.

These results suggest an important caution for recent efforts to reduce polarization. To the extent potential reforms would empower local party leaders – who already wield important influence today – they may further empower individuals who do not perceive the tradeoff between extremity and electability that political scientists perceive. As a result, reformers may wish to take a more surgical approach, empowering the national and state leaders who appear more supportive of centrists (La Raja and Schaffner 2015) while avoiding empowering local party leaders to the extent possible. At the same time, our data suggest intriguing potential strategies for reducing

polarization, a point we return to later.

THEORETICAL PERSPECTIVES AND EXISTING EVIDENCE

The formal leaders of political party organizations are capable of influencing primary elections in a number of ways: they can recruit new primary candidates with attributes they like (Lawless 2012), direct financial and human resources to potential nominees they favor (Cohen, Karol, Noel and Zaller 2008; Masket 2016), boost the fortunes of potential nominees they endorse (Kousser, Lucas, Masket and McGhee 2015), and "gatekeep" potential nominees they dislike by withholding their support (Niven 2006; Sanbonmatsu 2006).

Over the last several decades, the influence formal leaders of local political party organizations wield has generally decreased as elites in an "extended party network" have wielded more and more (e.g., Masket 2009). For example, recent years have witnessed changes to party nomination processes and campaign finance regulation (such as the *Citizens United* decision and state-based equivalents) that have dramatically reduced the electoral influence of national, state, and local political party organizations in primary elections. The share of campaign funds provided by formal party committees today is just half what it was a decade ago, while outside groups' influence in primary elections has dramatically increased (Skocpol and Hertel-Fernandez 2016).

One classic perspective on polarization would welcome political party leaders' declining influence in primary elections. This perspective depicts political party leaders as the principal proponents of polarized candidates. For example, Hacker and Pierson (2005) blame national "party leaders themselves" for the success of extremists in the Republican party (p. 9), documenting instances when they coordinated with outside groups to champion hard-right officeholders and priorities (p. 12).

However, a number of other scholars have argued that the declining influence of political party leaders might actually exacerbate elite polarization (e.g., Persily 2015; McCarty 2015*a*). A compelling theoretical logic supports this suspicion. Many of the interest group "policy

demanders" (Bawn et al. 2012) and "purist" ideological activists (Fiorina, Abrams and Pope 2005) who have gained influence over the last several decades are thought to be especially focused on advancing extreme policy agendas and thus supporting extremists in primaries. In contrast, party leaders oversee "the sole political organizations" – parties – "whose primary goal is to win [general] elections" (La Raja and Schaffner 2015). Although party leaders have their own policy demands, they are thought to have a stronger focus on winning general elections than others in extended party networks. As a result, they are expected to be especially likely to support centrist candidates for their party's nomination: conventional wisdom in political science is that the median general election voter prefers centrists (Carson, Koger, Lebo and Young 2010) and that centrists perform better than extremists in general elections (Canes-Wrone, Brady and Cogan 2002; Hall 2015).

If true, this line of reasoning suggests a rare strategy to decrease polarization in Congress and state legislatures: increase party leaders' electoral influence in primaries. Empowered party leaders might, this reasoning suggests, use their influence to "clamp down on candidates and incumbents outside the mainstream" and throw their weight behind moderates (Persily 2015, p. 132), ultimately "exercis[ing] a moderating effect on those who win office" (La Raja and Schaffner 2015; Hassell 2016*b*; Pildes 2015; McCarty and Shor 2015).

Relatively little existing data directly measures party leaders' preferences, making it difficult to distinguish between these perspectives, and the data that does exist is mixed; McCarty (2015*a*) writes, "we still have a poor understanding of the role played by political party organizations in producing more or less polarization" (p. 136). Existing data and theory also tends to focus on parties at the highest levels, where preferences for moderates might be especially strong (La Raja and Schaffner 2015, p. 23). Examining national parties, Hassell (2016*b*) finds "no systematic ideological difference between party supported and non-party supported candidates in primary elections" that lead to competitive general elections. However, national elites appear more likely to support moderate candidates ahead of non-competitive general elections because they are more closely aligned with moderate candidates on policy issues (Hassell 2016*b*). Anecdotally, some

accounts indicate national party figures like Karl Rove have coordinated to support moderates; other accounts of the same individuals suggest the opposite (Hacker and Pierson 2005). At the state party level, where more systematic data is available, La Raja and Schaffner (2015) find that parties tend to support moderate candidates for state legislature, but that this relationship might be explained by the fact that candidates facing close general elections tend to be more moderate anyway. Data is sparse about local parties, although scholars agree that they are extremely active in primaries, too. La Raja and Schaffner (2015) conjecture that local parties may be more enthusiastic about nominating extremists, as they "nurture some of the most ideological activists in the party" (p. 22).

We make two contributions to this literature. First, we consider a central theoretical mechanism that has received little attention in existing work: how party leaders *perceive* their party's incentive to nominate moderates. On a theoretical level, there is broad agreement on two principal goals party leaders have when evaluating potential nominees: loyalty and electability. On the one hand, party leaders want their nominees to remain loyal to the party if they are elected (Bawn et al. 2012; Hacker and Pierson 2005). On the other hand, party leaders want their parties to win elections, giving them an incentive to favor primary candidates who will be "most competitive in a general election" (La Raja and Schaffner 2015, p. 23). These two goals are thought to be in tension, however. Party elites care about victory in general elections and the party brand (Aldrich and Rhode 2000) and political scientists have found that nominating extreme candidates imperils both (Canes-Wrone, Brady and Cogan 2002; Hall 2015; Jacobson 2011). We theoretically consider reasons why party leaders – especially Republicans – might estimate that their parties face lower electoral incentives to nominate centrists than political scientists generally estimate.

Second, we collect some of the first data that speaks to how *local* party leaders navigate these trade-offs. Existing data largely focuses on national and state parties, but many of the reforms scholars have considered to empower party leaders would also give already-powerful local party leaders additional influence in primaries. Indeed, many have noted concern that these local party leaders might be systematically different than the state and national elites that have been the subject

of greater study (La Raja and Schaffner 2015; Persily 2014). But little data has examined local political parties directly.

Bringing these two areas of focus together, there are several reasons we expected local party leaders – and especially Republicans – to estimate smaller electoral rewards for nominating centrists than conventional wisdom in the political science literature expects. First, there is little ex ante reason to believe party leaders have access to unbiased estimates of the electoral penalties extreme candidates face in the first place. Elections are noisy, and it is difficult to estimate whether any particular candidate would have done better or worse if they had a different ideological position. This should be especially true for local party leaders, who do not closely observe as many elections as national party leaders. Next, there is good reason to think local party leaders might overestimate the general electorate's support for extremist candidates and policies. In recent years, polarized ideological activists have focused on barraging political elites with expressions of support for extreme agendas in direct communication, at town halls, with protests, and other tactics (Hacker and Pierson 2015; Skocpol and Hertel-Fernandez 2016; Skocpol and Williamson 2011). A principal aim of these tactics is to alter elites' perceptions of their incentives and of the public (see also Kollman 1998). To the extent that activists successfully cause local party leaders to overestimate popular support for extreme policies, the theoretical mechanism that might lead leaders to nominate centrists is undermined. And as leaders reflect on what kind of nominees will perform well with voters, they may think of the most vocal activists, not the typical voter (Miler 2009). In addition, party leaders of both parties may also be subject to false consensus effects and the availability heuristic, whereby they overgeneralize from their own opinions and the opinions of other partisans in their social networks about what the general electorate wants (Butler and Dynes 2016). Selection could also play a role: people who believe their polarized ideologies are favored in general elections (versus those who do not) might be more likely to agree to serve as party chairs in the first place (e.g., Thomsen 2014).

To the extent some local party leaders do not perceive extremism as bearing a large electoral penalty, we expected this pattern to be stronger for Republicans. Locally rooted, genuinely

grassroots organizations that represent liberal constituencies have atrophied in the last few decades, while their conservative counterparts have focused on pressuring party elites and are experiencing a renaissance (Blee and Creasap 2010; Hacker and Pierson 2005, 2015; Skocpol and Williamson 2011).[3] To the extent the organizations engaged in such strategies are stronger on the right, we expected Republican elites to be more likely to perceive extremists as more popular.

DATA

To examine how party leaders evaluate potential nominees, in 2013 we fielded a national survey of the chairs of the county-level (or equivalent)[4] branches of the Republican and Democratic parties.[5]

We chose county-level parties as the initial testing ground for our ideas for several reasons. First, they and their local equivalents are often the most active organizations in primary elections at the state and federal levels (Crowder-Meyer 2011). They also recruit a large share of candidates for local and state office and, in turn, many of the candidates who later run for higher offices (Crowder-Meyer 2013; Lawless 2012). Consistent with their importance in primary elections, over 78% of the party chairs in our sample indicated that people in their county party organization have helped support a particular candidate in an open primary. In a separate survey of candidates for state legislative office, we also found over 57% indicated that people in their local party organization were important in encouraging them to run for office. This echoes recent research by Feinstein and Schickler (2008) and Carr, Gamm and Phillips (2016), who find that political changes at the national level are often preceded by changes that occur in state and local parties. In addition, county parties are numerous enough to allow us to make statistically meaningful inferences while still providing a theoretically well-defined sampling frame (both parties in each county in the US).

[3]For example, Fang (2013) discusses how conservative organizations buy advertising time during Rush Limbaugh's conservative talk radio show that encourages listeners to call political elites on the same theme that Limbaugh had just been discussing, producing an avalanche of communication from conservative activists to political elites.

[4]Some states do not have county parties but instead have parties at the parish (LA), borough (AK), district (ND), city (CT), multi-county (MN), or sub-city (MA Dems) level.

[5]Nine states were excluded because neither party provided contact information for county-level officials: GA, IN, IA, KY, MI, NH, NM, OK, and WI.

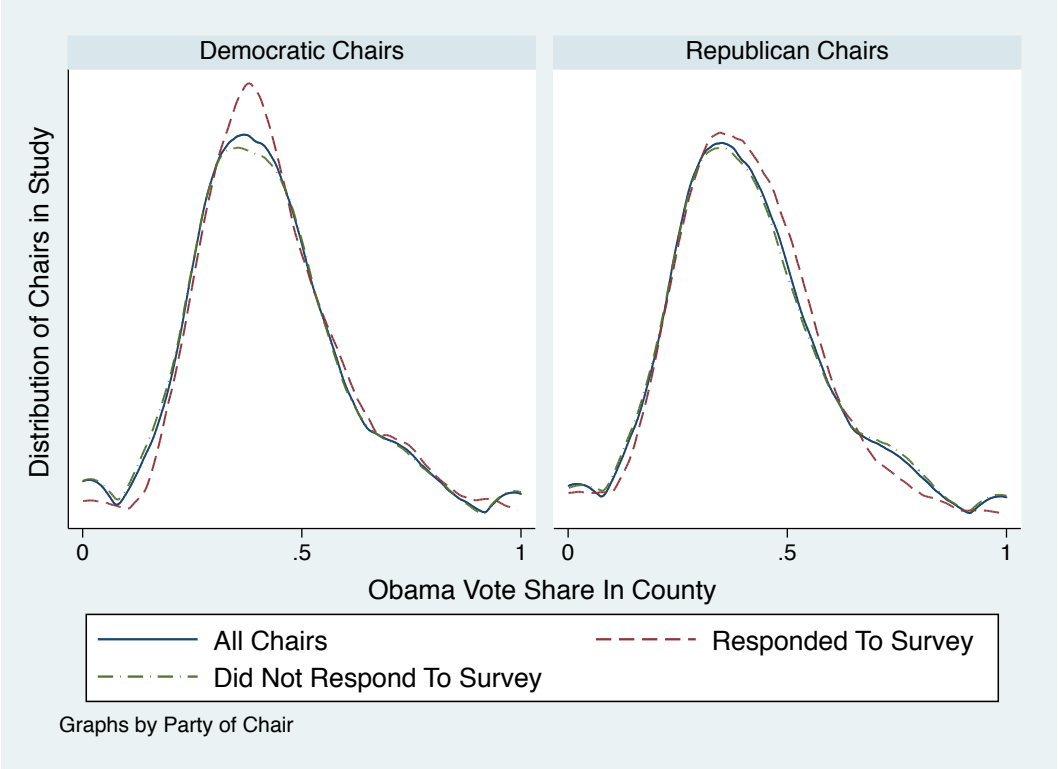
We would of course welcome further research on whether our conclusions would hold for party leaders at lower or higher levels, as such evidence would have important consequences for the shape of reform efforts that would complement the data we gathered.

To administer the survey, we first manually compiled contact information for 6,219 county party chairs. We gathered this information by searching the internet for the name of every county in the US together with the name of each of the two major parties. In some states, we found directories. In many states, we made inquiries to individual parties to gather contact information for each chair where it was missing.

In November 2013, we sent each chair a pre-notification and then a survey invitation at his or her email and/or postal addresses. (If both were available, we attempted contact at both.) We received responses from 1,118 (18%), a response rate comparable to recent surveys of politicians such as the NCS.

The respondents were broadly representative of the sampling frame. Response rates were nearly identical by region; for Republican (18.0%) and Democratic party chairs (17.9%); and for party leaders previously identified as men (18.2%) and women (18.5%). One potential concern with the data is that only party chairs in uncompetitive areas would respond. However, Figure B.1 indicates that the underlying partisan composition of the areas where our respondents are from is fairly representative.

Figure 5.1: Obama 2012 County Vote Share Among Survey Respondents and Non-Respondents



Another possibility is that only county party chairs from very small counties would be willing to respond to our survey, undermining the external validity of our inferences. Figure B.2 shows that, if anything, the opposite is the case: we received a similar response rate in counties of all sizes, and very slightly more responses from larger counties.

Figure 5.2: County Population Among Respondents and Non-Respondents

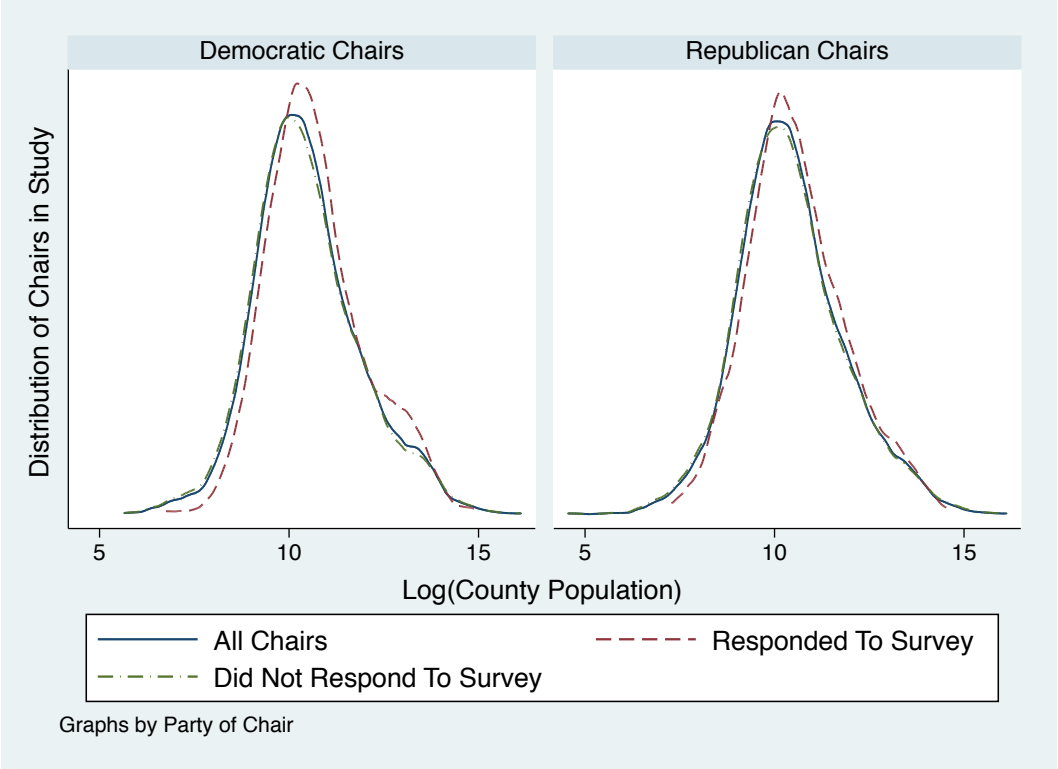


Table B.1 in the Appendix provides regression models predicting whether party leaders responded to the survey as a function of covariates. The only significant coefficient is the finding that party leaders in larger counties were slightly more likely to respond.

All three of our studies draw on data from this original sample.

STUDY 1: CANDIDATE CHOICE CONJOINT EXPERIMENT

Our first study consisted of a conjoint experiment within the survey (Hainmueller, Hopkins and Yamamoto 2014). Conjoint experiments involve forcing respondents to make trade-offs between two possible choices that differ along a variety of dimensions and estimating which dimensions drive their choices. Providing respondents with a forced choice allows for a statistical estimation of their revealed preferences over each dimension and places respondents' preferences on common scale. Providing multiple dimensions enhances the naturalism of the choices respondents face and

allows direct comparisons of how important different dimensions are in driving their choices.

Design

In our experiment, we asked county party chairs to pick which of two possible candidates they would prefer to run in their party's primary for an open seat. Our experiments began, "Suppose there is a primary for an open [county board / state legislative / US House][6] seat in your county and the two individuals below are considering running. We'd like you to consider the following two potential candidates for this office." The survey then described "Candidate A" and "Candidate B" by displaying two side-by-side lists of the candidates' personal attributes. After the local party leaders viewed the candidates, we then asked, "Which of the above candidates would you be more likely to encourage to run for office?"

Unbeknownst to the party leader completing the survey, each aspect of each candidate's biography was independently generated at random: the survey supplied each candidate's gender (signaled by first name), age, occupation, experience in the party, life circumstances, personal characteristics, and political ideology. For political ideology, we described some candidates as more moderate than the typical voter in their party (for Democrats, more conservative; for Republicans, more liberal); we described other candidates as similar in ideology to typical party members; still others we described as more extreme than typical party members (for Democrats, more liberal; for Republicans, more conservative). Providing several traits for each candidate beyond ideology was intended to enhance the naturalism of the experiment and ensures party leaders are not cued to focus on ideology when making their evaluations (Hainmueller, Hopkins and Yamamoto 2014). However, all of the traits (ideology, gender, etc.) were independently randomized, meaning that we can compare how party leaders reacted to candidates with each trait to estimate the effects of each trait, as each trait is uncorrelated with the others by design.

Online Appendix Table B.2 gives the full language for each condition. Online Appendix Figure

[6]The level of government was randomized to assess the robustness of the results. County party leaders play a role in recruiting and screening candidates at all these levels of government. The results do not meaningfully differ based on the level of government displayed in the vignette.

B.3 shows how the survey instrument appeared to respondents in the online version of the survey. To match our theory, we focus on cases where party leaders were presented with a choice where one candidate was more centrist than their party and where one was more extreme.

Results: Who Party Leaders Prefer To Run

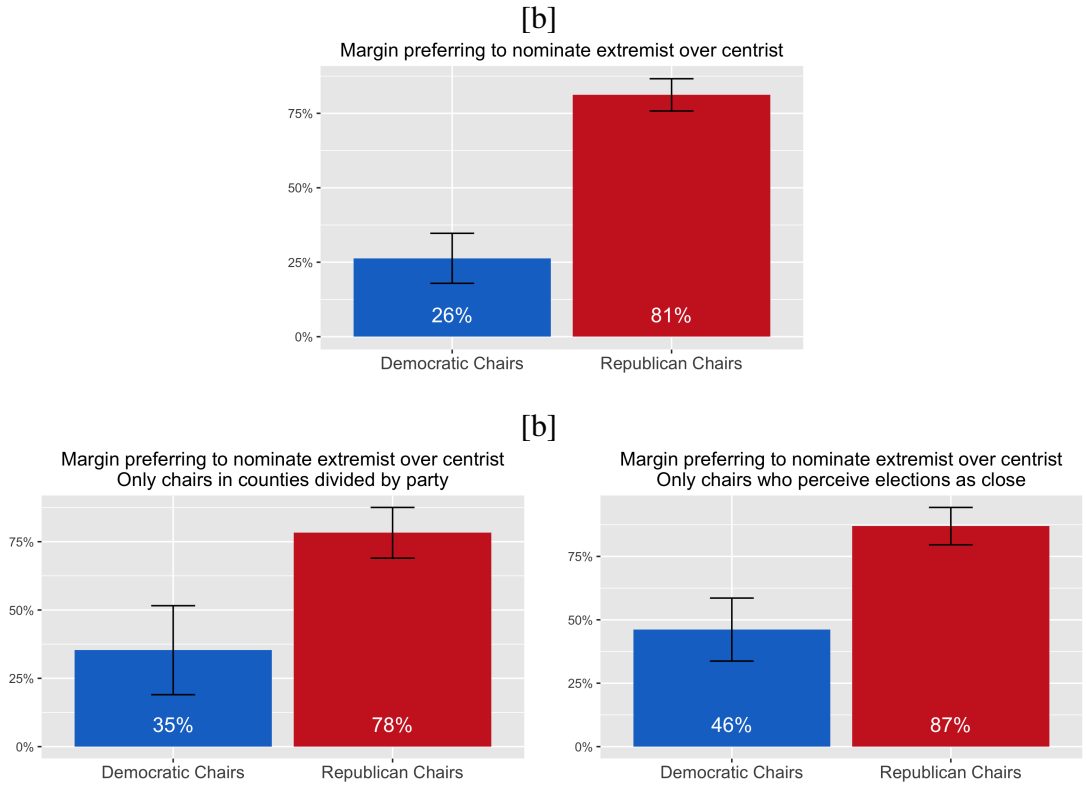
When faced with a choice between a candidate more extreme than their party (increasing polarization) or a candidate more centrist (reducing polarization), each of whom had many other randomly assigned attributes, party leaders preferred that the more extreme candidate run 76% of the time, or by a more than 3-to-1 margin. Disaggregating the data by party shows that this is largely driven by Republican party chairs. Democratic party chairs preferred extremists 63% of the time, but Republicans preferred extremists 91% of the time, or by about 10 to 1. Regardless of the other traits each candidate had, Republican party chairs preferred the extremists almost every time.

Figure 5.3 communicates the magnitude and robustness of these results. Each panel shows the 'win margin' of the extremist candidate in these match-ups, subtracting the share of party leaders who preferred the centrist nominee from the share who supported the extremist nominee. The error bars show one standard error around our estimate of the mean. The first panel shows the results just described, where a larger share of chairs in both parties prefer an extremist to a centrist.

The bottom two panels of Figure 5.3 help evaluate the robustness and generalizability of this finding. First, one potential concern with these results is that many county party leaders work in areas where their party is guaranteed to win or lose elections, reducing their incentive to nominate more electable candidates. The bottom left panel of Figure 5.3 therefore shows the results just for the subset of county party chairs in counties where Obama received between 40% and 60% of the two-party vote in 2012, and therefore where general elections are likely to be competitive. Next, the bottom right panel shows the subset of county party chairs who subjectively perceive general elections in their area as competitive.[7] As the figure illustrates, the results are largely robust when we examine these especially relevant subgroups. Indeed, if anything, party chairs who perceive

[7]Specifically, we asked party leaders what share of offices in their county their party reliably won. We include in this category party leaders who indicated that their party won between 26-50% or 51-75% of the time.

Figure 5.5: Robustness checks



elections in their area as more likely to be up for grabs are *more* likely to prefer extremist nominees, with Republican party chairs in such areas preferring extremists by 15 to 1.

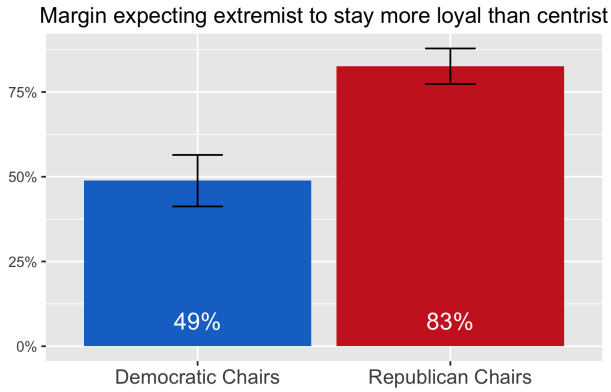
Mechanisms: 'Having Their Cake And Eating It, Too'

After party leaders selected which primary candidate they preferred, we also asked them several follow-up questions to understand the mechanisms driving their choices, including their perceptions about which of the two candidates would be more likely to win the general election and which of the two candidates would be more likely to stay loyal to the party if elected. Party leaders were significantly more likely to select as preferred candidates who they perceived as having these qualities, by about a 4 to 1 margin for each.

Figure 5.6 plots the margin by which party leaders were more likely to say that extremists would stay loyal to the party (relative to centrists). Party leaders on both sides recognize that extremists

are more likely to toe the party line (Bawn et al. 2012).

Figure 5.6: Will the extremist or the centrist be more loyal if elected?

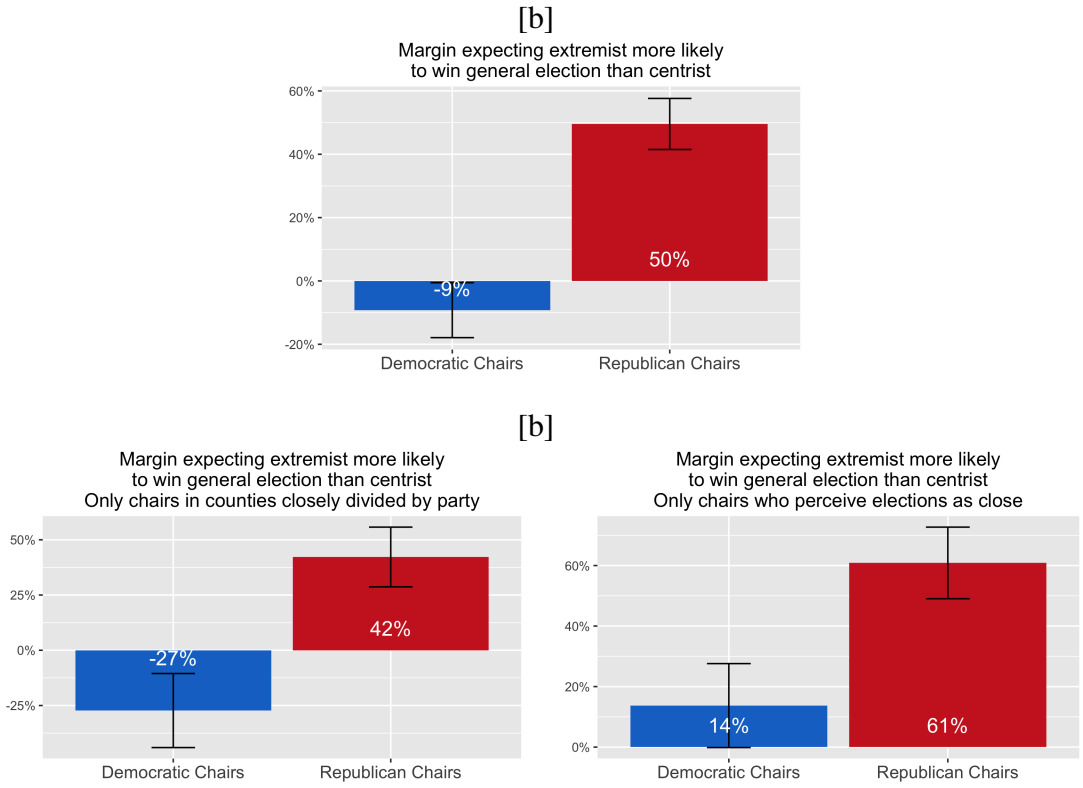


More surprising is how party leaders perceive extremists' and centrists' electability. Do party chairs appreciate the trade-off between extremists' greater loyalty and centrists' greater electability? For Democratic party chairs, the answer seems to be yes. The first panel of Figure 5.7 shows that Democratic chairs appear to see this trade-off to some extent; they are slightly more likely to see centrist candidates as more electable, although this difference is not statistically significant. At worst, Democratic party chairs see centrists and extremists as similarly electable, making their judgments about electability based on the other traits in the candidate profiles.

The picture is quite different for Republican party chairs. Republican chairs overall – and in both objectively and subjectively competitive counties – see extremist candidates as *more* likely to win general elections. 75% of Republican party chairs indicated they thought the extremist candidate they saw in the conjoint would be more likely to win the general election than the centrist candidate they saw, a margin of 50% for the extremist candidates. This difference persists for Republican party chairs who work in closely divided counties and is even larger for Republican chairs who subjectively perceive elections in their areas as close.

Together, these results suggest an intriguing explanation for why Republican party chairs prefer extreme candidates for their party's nomination over centrists: unlike Democrats, most Republican party chairs appear to believe they can 'have their cake and eat it, too' by nominating extremists,

Figure 5.9: Robustness checks



reaping both electoral and ideological rewards. Ironically, political science evidence suggests the exact opposite is more likely to be the case: Hall (2015) finds that the penalty for nominating extreme candidates in general elections is especially *large* for Republicans.

This divergence between party leaders' perceptions and political science evidence underscores our point that political scientists cannot necessarily assume that local party elites perceive the political world in the same way that they do. It may well be the case that party leaders understand something political scientists do not – but regardless of who perceives political parties' incentives more accurately, Study 1 provides our first indication that political scientists' and party leaders' perceptions of the general electorate and their political incentives appear to diverge. Study 1's results are consistent with our argument that local party chairs – especially Republicans – might not perceive nominating centrists as bearing electoral rewards.

STUDY 2: PARTY LEADERS' PERCEPTIONS OF PUBLIC OPINION

Could it really be the case that local Republican party chairs perceive the general electorate in their area as much more conservative than political scientists? The previous study assumes party leaders can understand or are prone to think in terms of the ideological labels that political scientists do. Therefore, our second study focuses on local party leaders' perceptions of the general electorate on individual issues. In particular, as a methodologically distinct test of our hypothesis, we also queried party leaders' beliefs about public opinion in their counties and their states. If Republican party chairs in particular expected extremist nominees to perform better than centrists, we believed this might be reflected in an overestimation of the conservatism of citizens in their areas.

Data

To query party leaders' perceptions, we asked them to estimate public opinion in their county and in their state on several issues. In particular, we asked them "What percent of people living in your state would agree with the following statements?" and "What percent of people living in your county would agree with the following statements?" followed by a series of statements. Each party chair made estimates of public opinion for both their state and their county on three issues that were randomly assigned (to prevent fatigue). We asked party leaders to estimate public opinion in both their state and in their county because party leaders indicate they are active in primaries for local, countywide, statewide, and Congressional office. Although not all offices line up to county and state boundaries exactly, many elections do and we expected these two boundaries to be well-known to county party leaders.

In order to be able compare party leaders' perceptions to reasonably precise estimates of reality, we asked party chairs to estimate county and state opinion on items that had been asked in the 2012 CCES, a large sample survey (Ansolabehere and Schaffner 2013). We were therefore constrained in the kinds of issues we could ask about, as the CCES only asked the full public sample about their opinions on a limited set of issues. Table 5.1 reports the text of the issue items in the 2012 CCES that were available, as well as the ideological direction of the "Yes" side and whether the

policy represented a status quo change in 2013. We also report weighted national mean support for each issue in the CCES.

Table 5.1: Issue questions available in the 2012 CCES.

CCES Issue Item Wording	National Mean Support in CCES	"Yes" direction	Status quo change?
"Same-sex couples should be allowed to marry."	53%	Liberal	Some states
"Grant legal status to all illegal immigrants who have held jobs and paid taxes for at least 3 years, and not been convicted of any felony crimes."	48%	Liberal	Yes
"Laws governing the sale of firearms should be made less strict than they are."	13%	Conservative	Yes
"Let employers and insurers refuse to cover birth control and other health services that violate their religious beliefs."	37%	Conservative	Yes
"By law, abortion should never be permitted."	12%	Conservative	Yes
"Always allow a woman to obtain an abortion as a matter of choice."	49%	Liberal	Yes

The results are robust when we limit to voters only; voter mean opinion is typically within 1 percentage point of overall mean opinion reported in Table 5.1, with the largest difference being a 3 percentage point difference on the religious exemption issue. This difference is nearly an order of magnitude smaller than the differences in perceptions between parties we discuss below and so elites thinking about voters only instead of all residents is unlikely to drive the results.

Empirical Strategy 1: Raw Data

Because each state and county has a relatively small number of CCES respondents, special care is required to compare party leaders' estimates of public opinion with the CCES' estimates of true public opinion. We use two approaches that both yield similar results.

We will begin by describing our first approach in the context of the county estimates. Our goal is to compare the average of party leaders' perceptions across all their counties to the CCES estimate of public opinion across all the counties where chairs responded. Our estimation strategy is as follows. Let C represent the set of all CCES respondents who live in counties where a party leader responded to the survey, with respondents indexed by c and issues by i. Denote opinions expressed on issue i by CCES respondent c as $o_{c,i}$. All the CCES questions we use are binary choice, such that $o_{c,i} \in \{0, 1\}$. Let $p_{c,i}$ represent the perception of the party leader in c's county of average support for issue i; that is, $p_{c,i}$ is a party leader's estimate of $E(o_{c,i})$ for their county. The average of $p_{c,i} - o_{c,i}$ within each county thus captures an estimate of party leaders' average overestimation of support for policy i. For example, suppose a party leader perceives support for a policy in their county at 80% but true support is only 60%. In this example, $E(p_{c,i} - o_{c,i}) = 0.8 - E(o_{c,i}) = 0.8 - 0.6 = 0.2$. To estimate party leaders' average overestimation of support for i, we estimate the mean of $p_{c,i} - o_{c,i}$ across all the CCES respondents.[8] To incorporate the CCES weights, we take the weighted mean of this quantity, multiplying by the CCES survey weights w_c, which have mean 1. In addition, because the CCES has many more respondents from larger counties than smaller counties, we weight these estimates inversely to county size so that party leaders from large counties and small counties matter equally. In particular, we weight each CCES observation by $\frac{\bar{s_c}}{s_c}$, where s_c is the size of each CCES respondents' county in 2013 according to the US Census. This makes party leaders the effective unit of analysis and counts party leaders from small and large counties equally. Our results are similar regardless of the weighting approach we use, however. We seek to estimate y_i, party leaders' average overestimation of county support for issue i. We therefore estimate y_i with:

[8] We acknowledge Doug Rivers for this suggestion.

$$\widehat{y_i} = \frac{\sum_{c \in C} \left[(p_{c,i} - o_{c,i}) w_c * \frac{\bar{s_c}}{s_c} \right]}{n(C)}, \tag{5.1}$$

where $n(C)$ is the number of CCES respondents.

We can also estimate public opinion in the average county – what party leaders' average perceptions would be if their perceptions were perfectly accurate – using:

$$\widehat{\bar{o_{c,i}}} = \frac{\sum_{c \in C} \left[o_{c,i} w_c * \frac{\bar{s_c}}{s_c} \right]}{n(C)}. \tag{5.2}$$

This quantity can be interpreted as 'the expectation of county opinion for a party chair respondent chosen at random.'

Likewise, party leaders' mean perception can be estimated with:

$$\widehat{\bar{p}_i} = \frac{\sum_{c \in C} \left[p_{c,i} w_c * \frac{\bar{s_c}}{s_c} \right]}{n(C)} \approx \bar{p}_i. \tag{5.3}$$

Our analysis at the state level is identical, except with s_c corresponding to the size of each CCES respondents' state. We cluster the standard errors at the county level for our county analysis and at the state level for our state analysis. In addition, our county analysis excludes the states where parties are not organized at the county level because the levels at which these parties are organized (parish, etc.) are not available in the CCES data: LA, AK, ND, CT, and MA.

Results: Republican Party Leaders Overestimate Support for Conservative Positions

Consistent with the findings from Study 1, the data from Study 2 indicates that Republican county party leaders perceive the general electorate as more conservative than political science evidence depicts it.

Figure 5.11 shows our estimates for party leaders' perceptions of public opinion in their counties and our estimates from the CCES of what their average perceptions would have been were they forming their perceptions in the same manner as political scientists. Table 5.2 shows point estimates. (Because smaller counties are more conservative but we weight all counties equally, the mean county opinion is more conservative than mean national opinion reported in Table 5.1.)

On average, Republican leaders appear to underestimate public support for the liberal policies on the CCES by about 10 percentage points and to overestimate public support for the conservative policies on the CCES by almost 40 percentage points. For example, only 13% of CCES respondents believe that "Laws governing the sale of firearms should be made less strict than they are," but Republican county party leaders perceive their counties as 67% supportive. On the other hand, the CCES evidence indicates that about 37% of people in the typical county supported same-sex marriage in 2013, but the typical Republican county party leader perceived county support at 27%. Democrats do not consistently overestimate voter liberalism, and indeed if anything appear to overestimate voter conservatism as well.

Figure 5.12 and Table 5.3 report the results for party leaders' estimates of state opinion. The results are similar: Republicans overestimate state support for conservative policies and underestimate state support for liberal policies.

MRP

To gain a better appreciation of the nature and magnitude of these misperceptions, we also used multilevel regression and poststratification (MRP) to estimate true public opinion in each state and compared these state-level MRP estimates to party leaders' perceptions their state.[9] MRP uses individual-level survey data and demographic information about the districts from the US Census to construct state-level estimates of support for each issue (Lax and Phillips 2009*a*,*b*, 2012; Park, Gelman and Bafumi 2004). Our MRP procedure first fits multilevel choice models to the responses to each issue question from the 2012 CCES. Each model fit returns estimated effects

[9]MRP estimates at the county level would be extremely imprecise, so we focus on the state-level where our estimates are more defensible.

Figure 5.12: State opinion

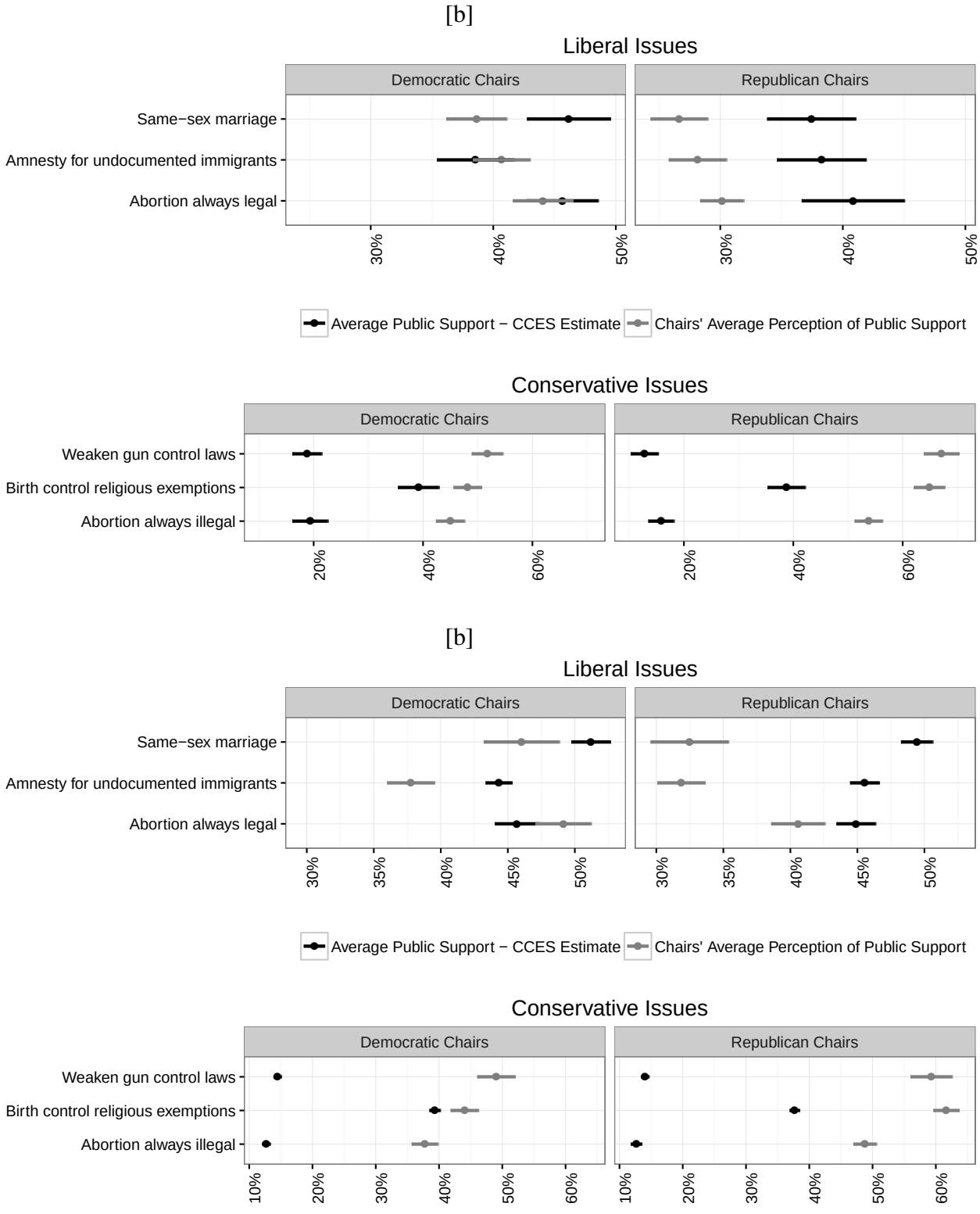


Table 5.2: Party leaders' perceptions of county public opinion and actual opinion

Issue (see Table 5.1 for item wording)	Democratic Chairs			Republican Chairs		
	Elite Perception	Actual Public Opinion	**Average Misperception**	Elite Perception	Actual Public Opinion	**Average Misperception**
Liberal Policies						
Abortion always legal	44.1	45.6	-1.60	30.1	40.8	-10.70*
	(2.449)	(2.914)	(3.388)	(1.780)	(4.189)	(4.377)
Amnesty for undocumented immigrants	40.7	38.5	2.13	28.2	38.3	-10.11**
	(2.340)	(3.136)	(4.208)	(2.357)	(3.633)	(3.507)
Same-sex marriage	38.6	46.2	-7.52*	26.6	37.4	-10.78*
	(2.470)	(3.398)	(3.314)	(2.335)	(3.611)	(4.183)
Conservative Policies						
Abortion always illegal	45.0	19.4	25.63***	53.8	15.8	37.93***
	(2.622)	(3.256)	(4.249)	(2.552)	(2.350)	(3.571)
Birth control religious exemptions	48.1	39.2	8.96*	64.9	38.7	26.14***
	(2.551)	(3.746)	(3.965)	(2.815)	(3.460)	(5.245)
Weaken gun control laws	51.8	18.8	32.97***	67.1	12.8	54.29***
	(2.846)	(2.692)	(3.810)	(3.201)	(2.504)	(3.775)

*** = $p < 0.001$. ** = $p < 0.01$. * = $p < 0.05$. *Standard errors are clustered at the county level.*

Table 5.3: Party leaders' perceptions of statewide public opinion and actual opinion

Issue (see Table 5.1 for item wording)	Democratic Chairs			Republican Chairs		
	Elite Perception	Actual Public Opinion	**Average Misperception**	Elite Perception	Actual Public Opinion	**Average Misperception**
Liberal Policies						
Abortion always legal	49.1	45.7	3.47*	40.6	44.9	-4.32**
	(2.080)	(1.643)	(1.668)	(2.005)	(1.459)	(1.318)
Amnesty for undocumented immigrants	37.8	44.3	-6.56**	31.9	45.5	-13.69***
	(1.764)	(0.977)	(2.239)	(1.775)	(1.082)	(1.889)
Same-sex marriage	46.0	51.2	-5.17**	32.5	49.4	-16.96***
	(2.820)	(1.454)	(1.834)	(2.909)	(1.185)	(2.346)
Conservative Policies						
Abortion always illegal	37.8	12.7	25.07***	48.8	12.7	36.13***
	(2.074)	(0.626)	(2.019)	(1.827)	(0.859)	(2.015)
Birth control religious exemptions	44.0	39.3	4.70*	61.6	37.7	23.97***
	(2.198)	(0.856)	(2.072)	(2.015)	(0.768)	(1.674)
Weaken gun control laws	49.0	14.4	34.57***	59.3	14.0	45.25***
	(2.978)	(0.602)	(2.992)	(3.287)	(0.611)	(3.036)

*** = $p < 0.001$. ** = $p < 0.01$. * = $p < 0.05$. *Standard errors are clustered at the state level.*

for demographic and geographic predictors. We then use the estimates from the multilevel model to estimate support for various demographic cells, identified by age, race, education, gender and state. Finally, using data from the US Census' American Community Survey, we weight those cells by their frequency in each state. The result is an estimate of the percent of each state supporting each issue. We then compare these estimates to party leaders' perceptions. Because of the large sample size of the CCES, many states have relatively large samples. For states with sufficiently large samples, MRP is designed so that the results approach disaggregation and rely very little on MRP's demographic weighting. Online Appendix C provides further details.

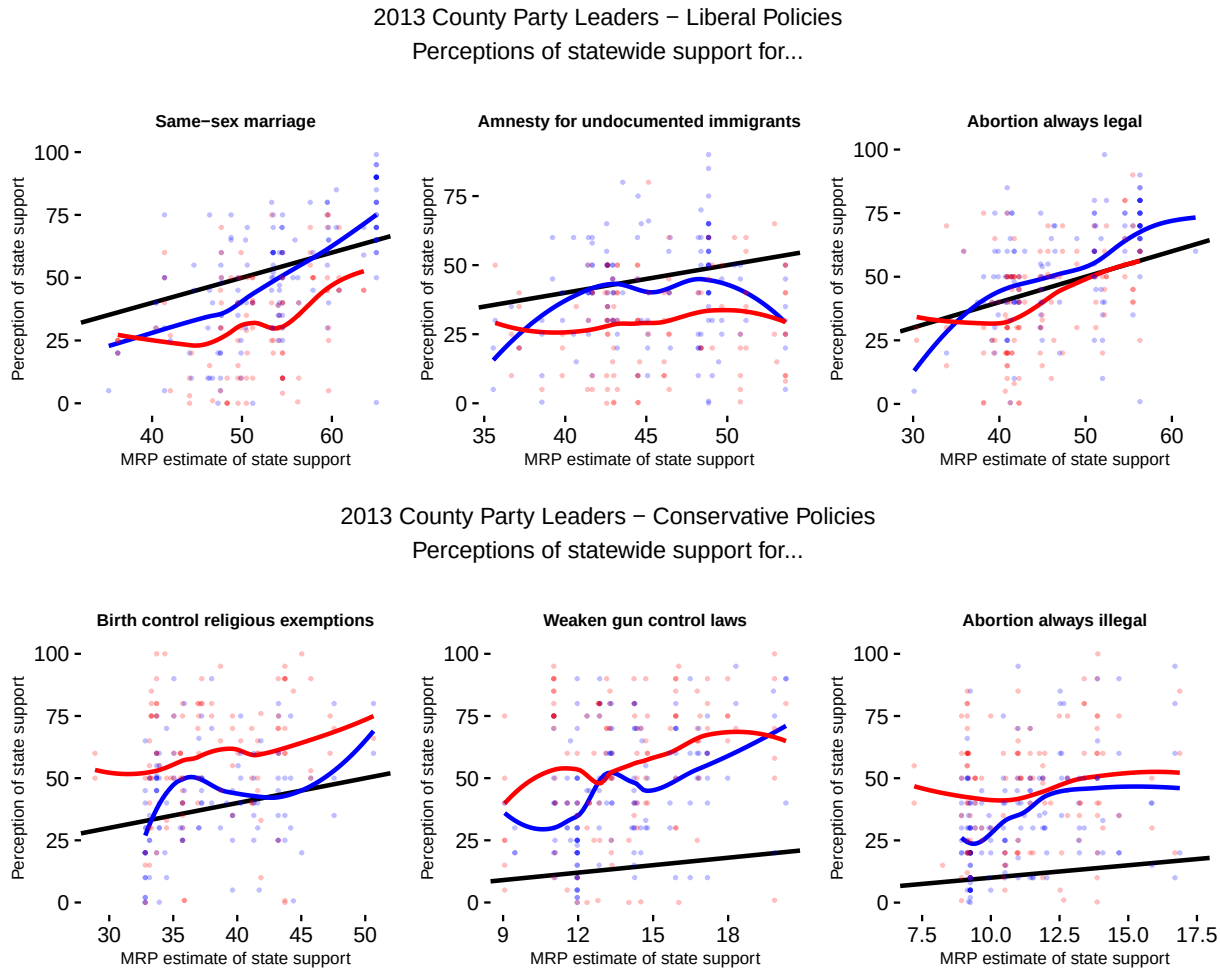
We present the MRP results graphically in Figure 5.13, with a loess smoother for each party. The x-axis on each graph show the MRP estimate of state support and the y-axis shows party leaders' estimate of state support. If party leaders were perfectly accurate, we would expect their responses to concentrate around the black line, which shows the line $y = x$. However, the results from the MRP estimates match the raw data: it appears that Republican party leaders consistently overestimate support for conservative policy positions, whereas Democrats do not do the same with liberal policy positions.

Discussion of Study 2

The results of our second study represent methodologically distinct evidence for the same finding as Study 1: whereas Democratic county party chairs perceive a general public that looks relatively similar to what political science evidence suggests, Republican county party chairs perceive a much more conservative general public.[10] These are exactly the perceptions conservative grassroots organizations have worked to give Republican leaders (Fang 2013; Skocpol and Williamson 2011). Importantly, these differing perceptions suggest that on many issues where political scientists would expect extremely conservative candidates to take positions out-of-step with public opinion, Republican leaders appear more likely to expect such candidates would be in-step. Given these differing perceptions, it is not surprising Republican local party leaders expect very conservative

[10]Broockman and Ryan (2016) queried sitting officeholders about their perceptions of public opinion in their districts and found similar results.

Figure 5.13: Party chairs' perceptions of state opinion compared to MRP estimates of true state opinion.



candidates to perform better in general elections than political science conventional wisdom predicts.

STUDY 3: IN DESCRIBING IDEAL CANDIDATES, REPUBLICAN CHAIRS SPONTANEOUSLY MENTION IDEOLOGY MORE OFTEN THAN DEMOCRATS, AND CONSERVATISM SIX TIMES MORE OFTEN THAN CENTRISM

Both of our first two studies relied on explicitly prompting party chairs for their beliefs about the electorate's ideological composition. However, it remains possible that ideological extremism is

not a quality chairs proactively seek out in candidates and that other qualities we failed to ask about overshadow this concern.

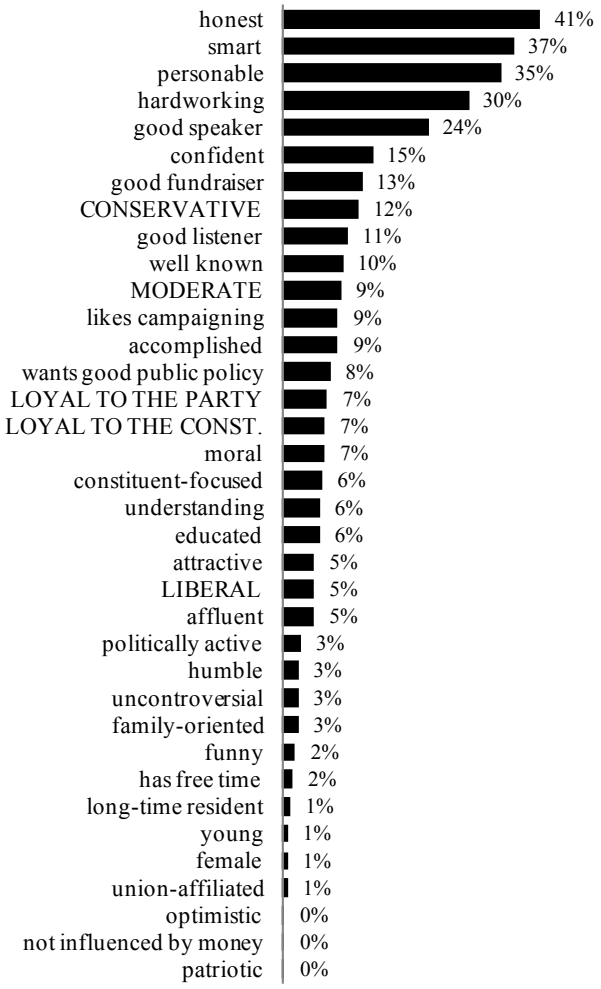
To measure whether ideological loyalty is a "top of mind" consideration for party leaders when they think about potential candidates, prior to our conjoint experiment, we asked party leaders an open-ended question (on the paper version of the survey only): "In an ideal world, what personal qualities would you like all of your party's political candidates to have? Please list as many as you would like." 84% of the 234 party leaders who answered the question listed at least one characteristic. Coders who were blind to the hypotheses of the study grouped their responses into 36 categories.

The data reveal two patterns consistent with our other results.

First, local party leaders of both parties seek out ideological orthodoxy when thinking about potential nominees. Figure 5.14 plots the frequency of each type of response across both parties. Characteristics clearly related to ideological loyalty – conservative, liberal, loyal to the party, and loyal to the Constitution – were mentioned by 28% of the sample, more than three times the number who mentioned ideological moderation or centrism (difference in proportions $p < 0.001$).

Second, Republican elites prioritize ideological loyalty far more than Democratic elites. Figure 5.15 plots the percentage of leaders in each party who mentioned each of the five most common traits as well as the percentage who mentioned any of the ideological responses we identified. Republican party chairs were twice as likely as Democrats to mention ideology ($p < 0.001$) – the starkest inter-party difference by far. These findings mirror other work finding that Republican elites place a special premium on ideological loyalty (Grossmann and Hopkins 2016) – but are at odds with hopes that Republican political party leaders might place more weight on centrism in order to win elections. In addition, while chairs of both parties were more likely to spontaneously mention extremism as a desirable quality than moderation or centrism, this differed by party – Democrats were twice as likely to spontaneously mention extremism than centrism as desirable, but Republicans were nearly six times as likely to do so.

Figure 5.14: Share of Chairs' Responses Mentioning Each Quality

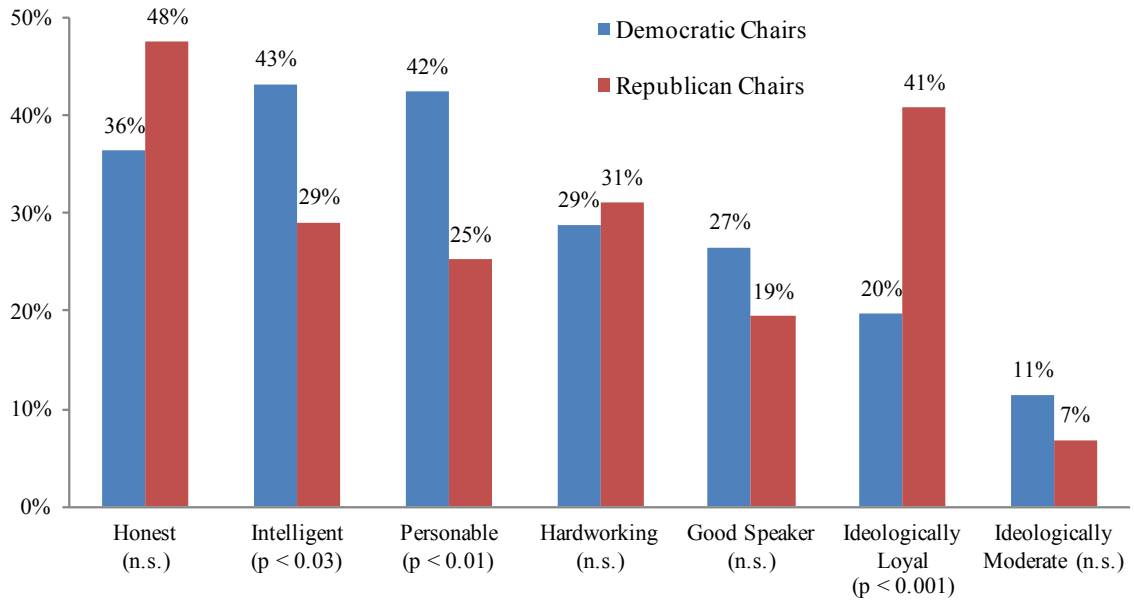


DISCUSSION: HAVING THEIR CAKE AND EATING IT, TOO

Recently, scholars and activists seeking to reduce polarization in American politics have considered one counterintuitive possibility: that reforms empowering formal political party leaders might actually reduce polarization, as party leaders might be more likely to favor nominating centrists in hopes their parties will perform better in general elections. However, many of these potential reforms would also further increase the power of local party leaders.

In this paper, we examined a novel reason why empowering these local party leaders might actually exacerbate polarization. Even if local party leaders face a trade-off between nominating

Figure 5.15: Share of Republican and Democratic Chairs' Responses Mentioning Each Quality



Notes: Percentage values correspond to the share of open-ended responses that mentioned each quality. p-values correspond to difference of means tests between how often chairs of each party mention the quality.

electable centrists and less-electable loyalists in reality, we theorized that they might discount the probability that nominating centrists would aid their party electorally for a variety of reasons: for example, not only are party leaders likely to be surrounded by likeminded and polarized individuals, a bevy of grassroots organizations – especially on the political right – have focused on distorting party elites' perceptions of the general electorate's demands (Fang 2013; Hacker and Pierson 2015; Skocpol and Williamson 2011). Our findings are consistent with exactly that expectation: most Republican county party leaders see extremists as more electable than centrists, while their Democratic counterparts appear to see centrists as only slightly more electable. In this way, Republican party leaders act as if nominating extremists allows them to 'have their cake and eat it, too' – winning more votes in general elections while only offering voters the opportunity to select extreme party loyalists. It may well be the case that the formal leaders of local parties are less enthusiastic about extremists than other local party activists like donors and interest group leaders. But many local party leaders appear not to believe nominating centrists would help their

parties win, and, as a result, many appear plenty enthusiastic about extremists still.

Our data has several limitations, and we would welcome future research that addressed them. First, this study uses survey data, not data on how local party leaders actually behave. Although this allowed us to randomly assign candidate attributes and better capture key theoretical mechanisms, observational data on how party leaders actually recruit candidates would complement this data. Moreover, our analysis does not definitively establish why local party leaders seem to underestimate the electoral rewards of nominating centrists; as with all studies that identify key mechanisms, questions remain about what mechanisms underpin those mechanisms themselves. We also focused on open seats in our conjoint experiment, since this is where polarization appears to be more pronounced (Theriault 2006), but the dynamics when incumbents are running for re-election would also be of interest. In addition, we look forward to seeing whether these patterns persist over time; variation over time would be informative about mechanisms. Finally, it remains possible that if political parties' resources and incentives did change, chairs might have access to different information or different people might become party leaders in equilibrium (Masket 2016; McCarty 2015*a*). It would also be of interest for reform efforts to understand whether these same patterns persist or are reversed at other levels of government. For example, the chairs of the RNC or DNC might perceive the world differently precisely because they are less subject to the grassroots pressures and other dynamics we identified.

Our findings that Democratic party leaders seem less sanguine about extremists' electoral prospects than Republicans also suggest a new mechanism that may underpin asymmetric polarization. As McCarty (2015*b*) recently reviews the literature, there appears to be a "major partisan asymmetry in polarization," with "the movement of the Republican Party to the right account[ing] for most of the divergence between the two parties." The same pattern generally holds at the state level (Shor 2015). Our results about how Republicans local party leaders believe they can 'have their cake and eat it, too' when considering potential nominees raise the possibility that other Republican elites misperceive how conservative it is in their electoral interest to be.

At the same time, our data suggest an intriguing potential strategy for reducing polarization:

consistent with recent field experiments (e.g., Butler and Nickerson 2011), supplying local party leaders with more reliable information about public opinion and their incentives might change their perceptions and reduce their support for extremists. If local party leaders came to believe they were undermining their party's electoral prospects, they might be less likely to favor nominating extremists than they appear today. This hypothesis is ripe for future research. More broadly, in an era when an unprecedented crush of activists has sought to warp how elites and voters perceive each other, our results underscore the importance of studying how political actors subjectively perceive the political world (e.g., Broockman and Ryan 2016; Miler 2009).

Chapter 6

How the Public Perceives Public Opinion and Why It Matters

We have seen that politicians' perceptions of public opinion on many high-salience issues are inaccurate and biased. This trend is present among candidates running for state legislative office as well as among party leaders. The consistent bias in these elites' perceptions of public opinion suggests that aspects of the information environment in contemporary American politics amplify the preferences of conservative citizens and make them seem more numerous. In Chapter 4, I examined some of these potential information sources and how political elites process information about public opinion in biased ways.

Legislators and party leaders have important representational roles in American politics, but ordinary citizens ultimately hold power through their electoral control of representatives. Do ordinary citizens share elites' asymmetric misperceptions of where their fellow citizens stand on the issues? Prominent theories of social influence suggest that people's political participation and attitudes interact with their perceptions of others' opinions and that perceptions of public opinion may affect people's attitudes and behavior. Several theories and empirical studies consider how people's social perceptions shape their own preferences and their willingness to express preferences or participate in politics in other ways. In this chapter, I investigate what the public believes about public opinion on salient political issues. I find that, despite the salience of these controversial issues, members of the public have very inaccurate beliefs about their fellow citizens' opinions on these issues.

PERCEPTIONS OF PUBLIC OPINION AND IMPERSONAL INFLUENCE ON POLITICAL ISSUES

People's social evaluations shape their decisions (e.g. Cialdini and Goldstein 2004; Deutsch and Gerard 1955; Huckfeldt 1980, 1984; Huckfeldt and Sprague 1995). Few people want to be in the minority, preferring to match their behavior and opinions to what they perceive to be the majority position, and people's confidence in their own opinions and actions is bolstered by the sense that they are not alone. This social influence extends to political opinions, where evidence shows that it shapes which views are expressed strongly in society. Noelle-Neumann's (1974) theory describes a self-reinforcing process—a "spiral of silence"—whereby people's beliefs, true or false, that their preferences are unpopular cause them to be less willing to express them. As the spiral continues, minority positions are stifled. Mutz (1992, 1997, 1998) demonstrates that perceptions related to social groups—including perceptions of others' opinions and economic well-being—can shape people's policy preferences and their behavior. In a meta-analysis, Glynn, Hayes and Shanahan (1997) find modest support for Noelle-Neumann's theory in empirical data—perceiving that one's positions are more popular has a consistent but modest positive effect on attitude intensity and willingness to express opinions.

In political science, research on social influence and opinion has often focused on "bandwagon" effects, although competing "underdog" effects are often identified as well (e.g. Ansolabehere and Iyengar 1994; Bartels 1985; Ceci and Kain 1982; Nadeau, Cloutier and Guay 1993; Simon 1954). However, the presence of bandwagon effects necessitates that people accurately perceive the distribution of opinion—and in some theories its first derivative with respect to time. In high-salience cases like presidential races, poll results are prominent enough that people can be aware of the state of opinion. But can people make sense of their peers' opinions on the policy issues that make up much of the political fighting between elections?

It is important to take seriously the possibility that the public could have inaccurate and biased views of public opinion. In the past, researchers have found that the public sometimes

overestimates the conservatism of the electorate. Fields and Schuman (1976) identify two competing trends in Metro Detroiters' opinions — the "looking-glass perception," a general trend in which people believe that others' opinions are similar to their own, but also a conservative bias, as people believe that others are more racially conservative than they actually are. Glynn (1989) finds that respondents viewed their neighbors as being more conservative than themselves but perceived residents of their city as more liberal than themselves.

In Chapter 3, David Broockman and I find that candidates for state legislative offices have very inaccurate perceptions of public opinion in their districts and are usually biased, with candidates believing that support for conservative positions is higher than it actually is. These misperceptions are asymmetric; candidates do not uniformly overestimate support for their own positions. Conservative candidates tend to overestimate support for conservative positions by 15-20 percentage points, but liberal candidates also believe their constituents are more conservative than they actually are, erring in that direction by about five percentage points on average. The causes of this bias are unclear and likely multifaceted, but it may stem from conservatives simply being "louder" in support of their positions. For example, evidence from the Cooperative Congressional Election Study suggests that Republicans are more likely than Democrats to contact their representatives (Broockman and Skovron 2014). Other ideological asymmetries in contemporary politics may exacerbate this bias. For example, liberals in the electorate may be less visible because they do not ideologically self-identify as much as conservatives do, despite the fact that liberal preferences about the size of government are widely popular and consistently outpoll conservative positions (Ellis and Stimson 2012*b*).

There are several reasons to expect that candidates and other political elites would have more accurate perceptions of public opinion than the public. First, re-election-focused politicians have strong incentives to pay attention to their constituents' preferences (Downs 1957; Mayhew 1974; Stimson 1995). Second, elites have much more access to polls than the public does (Geer 1996; Herbst 1993). Third, generally low levels of political sophistication and knowledge in the electorate (Converse 1964; Delli Carpini and Keeter 1996) suggest that most citizens do not spend

much time developing a rich picture of their political world. These conditions suggest that public misperceptions of public opinion are likely to be widespread and consequential for public opinion and political behavior.

Competing expectations for the development of misperceptions and their role in political behavior

At the elite level, I presented evidence that suggests that asymmetries in the political information environment may lead to the pattern of asymmetric misperceptions that state legislative candidates and county party leaders exhibit in their perceptions of public opinion. Much like for political elites, different assumptions about the interaction of information and could lead to different expectations for the pattern of their perceptions. Although ordinary citizens don't observe the results of grassroots campaigns to contact politicians' offices, other aspects of grassroots mobilization could generate media coverage or other forms of public attention. Asymmetries in activism thus might filter down to ordinary citizens, even if the ultimate target is to influence elected officials. However, many citizens are inattentive to politics because the need not know detailed information about politics to fulfill the tasks required of them as citizens (Lupia 2015). Citizens' perceptions of public opinion reflect a different informational context than those of elites, but they still tell us important information about the political information environment.

How would the public behave if its perceptions were similar to the asymmetric ones exhibited by elites? Although empirical evidence on the spiral of silence is mixed, the theoretical implications for a pattern of asymmetric misperceptions are clear: Noelle-Neumann's theory would predict that an asymmetric pattern of misperceptions would lead to a shift in attitudes and participation in favor of the side that overestimates support for its position, with those who underestimate support for their position becoming less willing to express their position. Such a pattern could lead to asymmetric polarization among the public. Despite these opportunities for asymmetric misperceptions to arise, many psychological theories would predict that citizens would exhibit false consensus bias, leading them to overestimate support for their own positions (Fields and Schuman 1976; Krosnick 1990; Maner et al. 2005; Mullen et al. 1992; Ross, Greene and House

1977; Sherwood 1981). Wishful thinking bias, in which citizens perceive agreement between themselves and other citizens and If this kind of motivated psychological processing takes over, we might expect the *symmetric errors* pattern of misperceptions to arise. While both patterns of misperceptions would be consequential for citizens' participations, the differences between a symmetric and asymmetric pattern are quite consequential.

In the next section, I show that, on average, ordinary citizens are not very different from candidates and legislators in their perceptions of public opinion. Despite having less information and paying less attention to politics than their elected officials do, they, too, misperceive public opinion and believe that the public is more conservative than it actually is on some of the most important issues in contemporary American politics. Across several prominent issues, I find that Americans broadly do not know where their fellow citizens stand. The biases in their perceptions go beyond simple motivated reasoning, suggesting a pervasive pro-conservative bias in people's perceptions, but one that is of secondary importance to the sheer magnitude of the error in their perceptions.

WHAT PEOPLE BELIEVE ABOUT PUBLIC OPINION

What do Americans believe about public opinion? To begin to answer this question, I conducted a survey asking people's perceptions of public support for high-profile issues in American politics. The data for this section come from a representative, non-probability sample of the American adult public recruited by Survey Sampling International (SSI) in January 2014, $n = 1240$.[1]

I asked respondents, "What percent of people living in your state would you say agree with the following statement?" and presented several statements about policy positions that were taken from the 2012 Cooperative Congressional Election Study (CCES). As in previous studies, the wording of the items matched the CCES wording exactly:

- Laws covering the sale of firearms should be made less strict than they are.

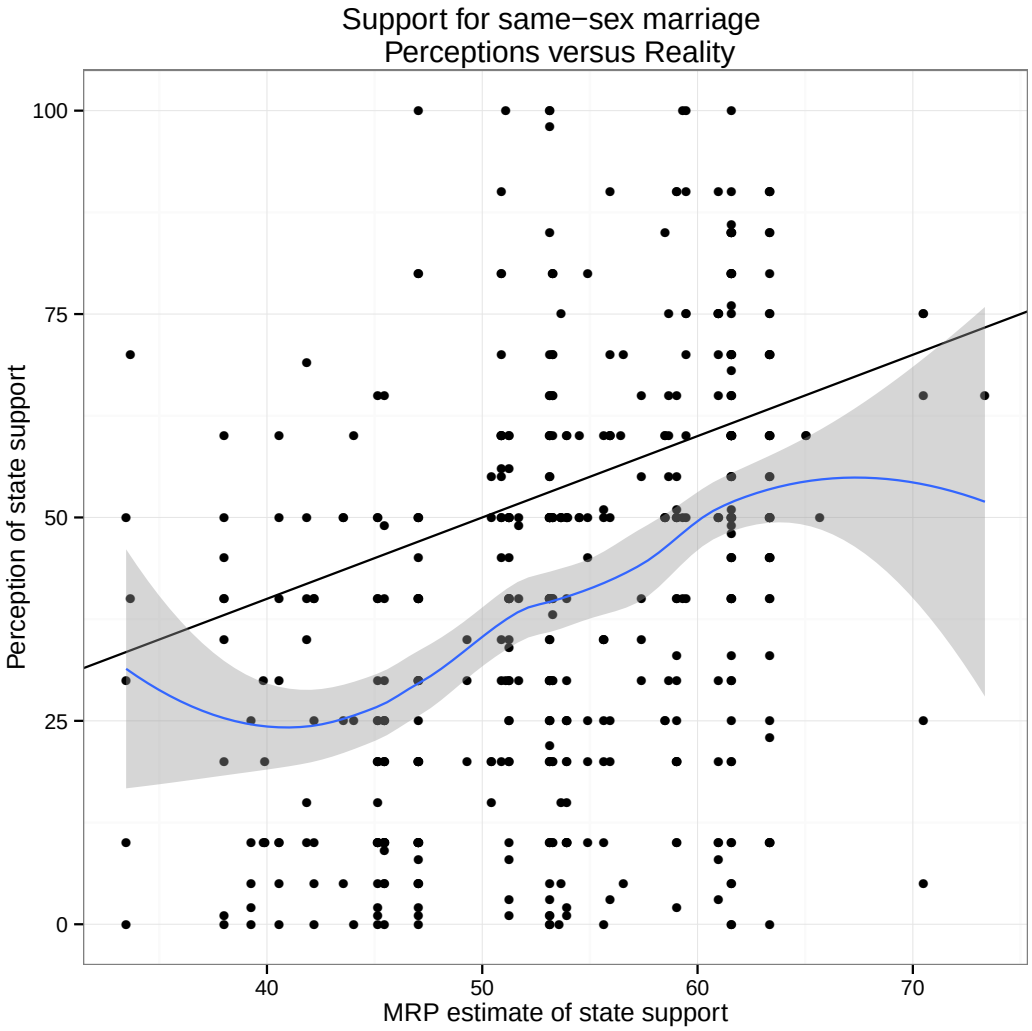
[1] In the analyses that follow, I use weights to match the sample to Census benchmarks.

- Grant legal status to all illegal immigrants who have held jobs and paid taxes for at least 3 years, and not been convicted of any felony crimes.
- Same-sex couples should be allowed to marry.
- Let employers and insurers refuse to cover birth control and other health services that violate their religious beliefs.
- By law, abortion should never be permitted.

These issues were chosen to represent a variety of conflicts in American politics, as well as to vary in whether the status quo is liberal or conservative and how popular the issue is. First, I compare respondents' guesses about public opinion in their states to estimates of the true values as estimated by multilevel regression and poststratification (MRP)(Park, Gelman and Bafumi 2004; Lax and Phillips 2009*a*). I present each issue as a chart, with the raw data plotted. The x-axis of each figure is the statewide estimated support for each policy position from the 2012 CCES. I use MRP to estimate state-level support, although the CCES' large sample size means that MRP approaches simple disaggregation in this case. Each y-axis represents the respondents' estimates of state-level support for the policies. Thus, each point in the figure compares a respondent's estimate of public support for the policy to the true support in his/her state. The black lines represent perfect accuracy (a line with an intercept of zero and a slope of one), while the blue line is a loess fit to the data. I visualize the data in order to show the dispersion in the data, and to avoid the problems identified by Achen (1977, 1978) that arise from using summary statistics such as correlation coefficients to describe relationships that might have biased intercepts.

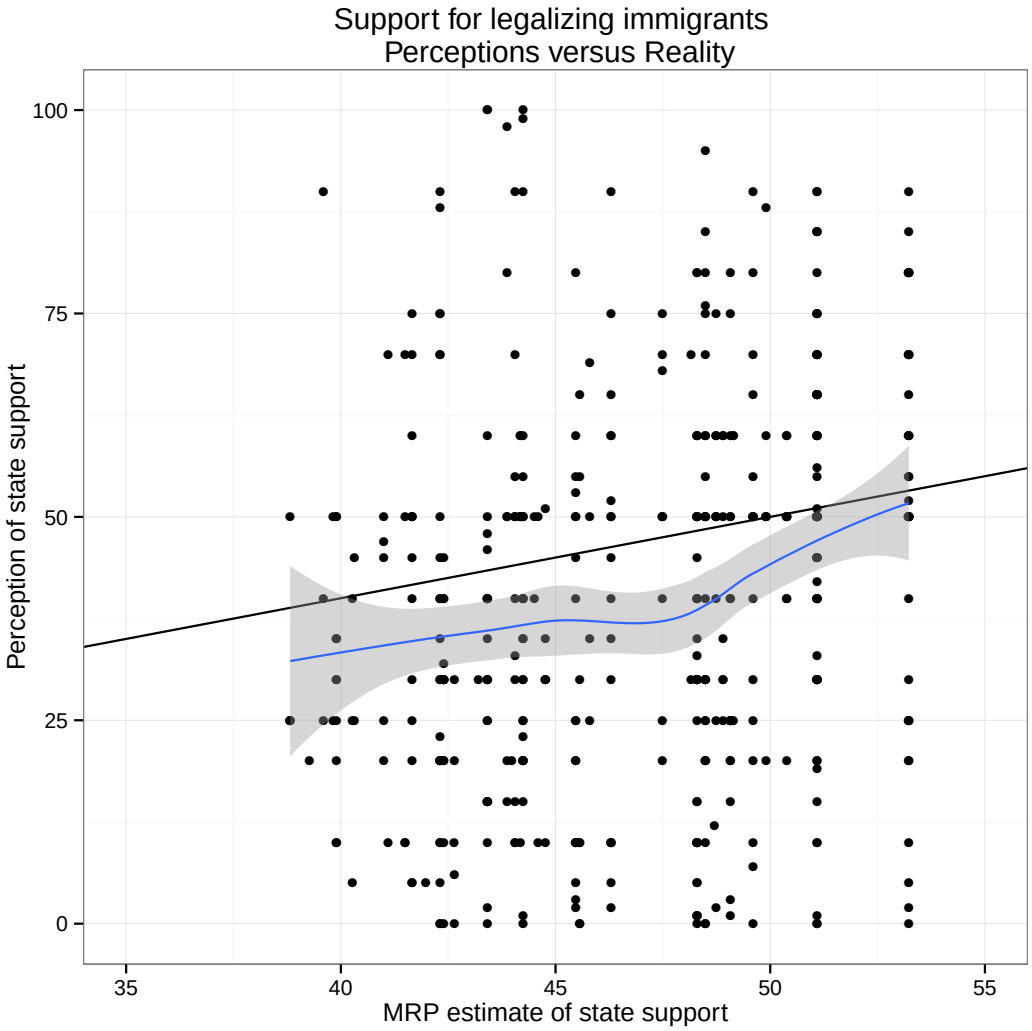
In the caption to each figure, I report the correlation between respondents' guesses and the MRP estimate, as well as the mean absolute error that respondents made on that issue. Note that the axes are scaled very differently, within as well as across charts. This reflects the much wider variation in respondents' estimates of public opinion versus the range of true state opinions.

Figure 6.1: Public perceptions of state-level support for same-sex marriage.



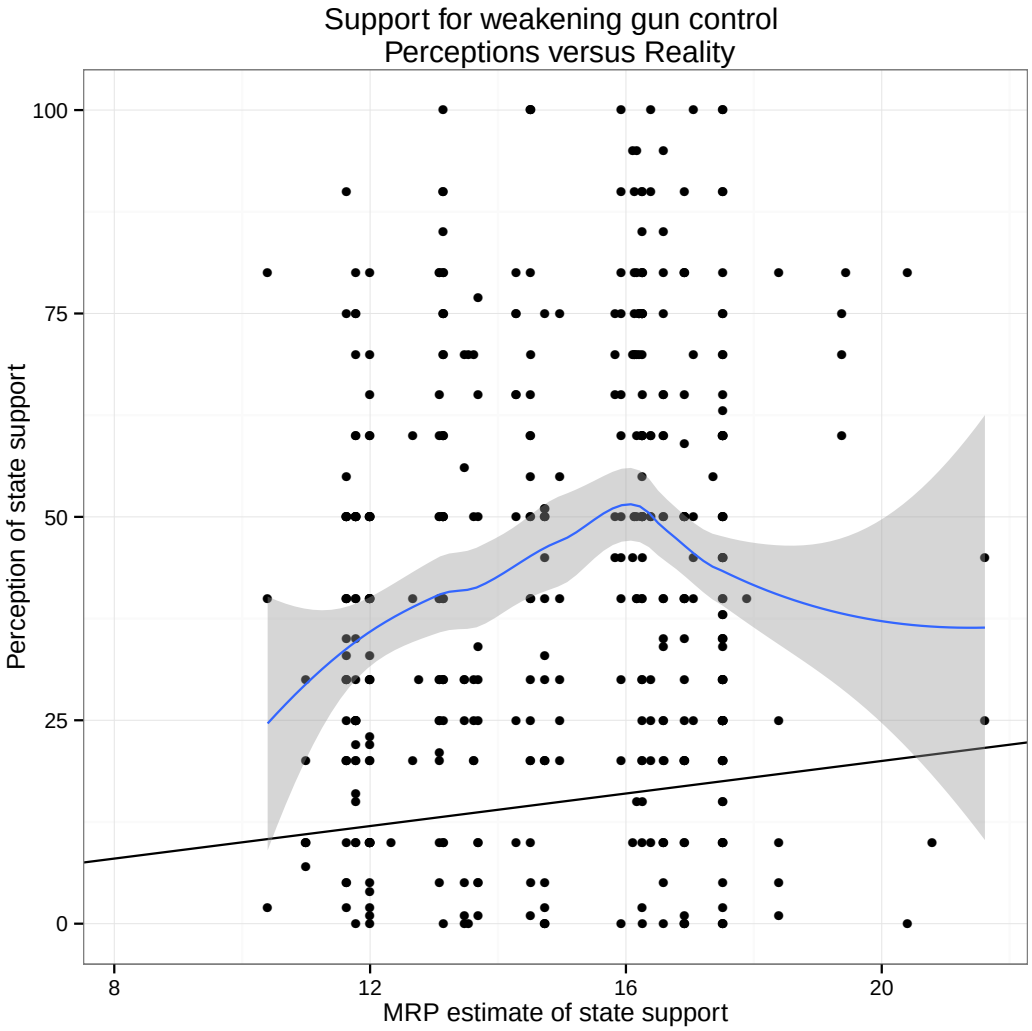
Statement: “Same-sex couples should be allowed to marry. " Mean absolute error: 39.80 percentage points. Correlation: 0.38.

Figure 6.2: Public perceptions of state-level support for amnesty for illegal aliens.



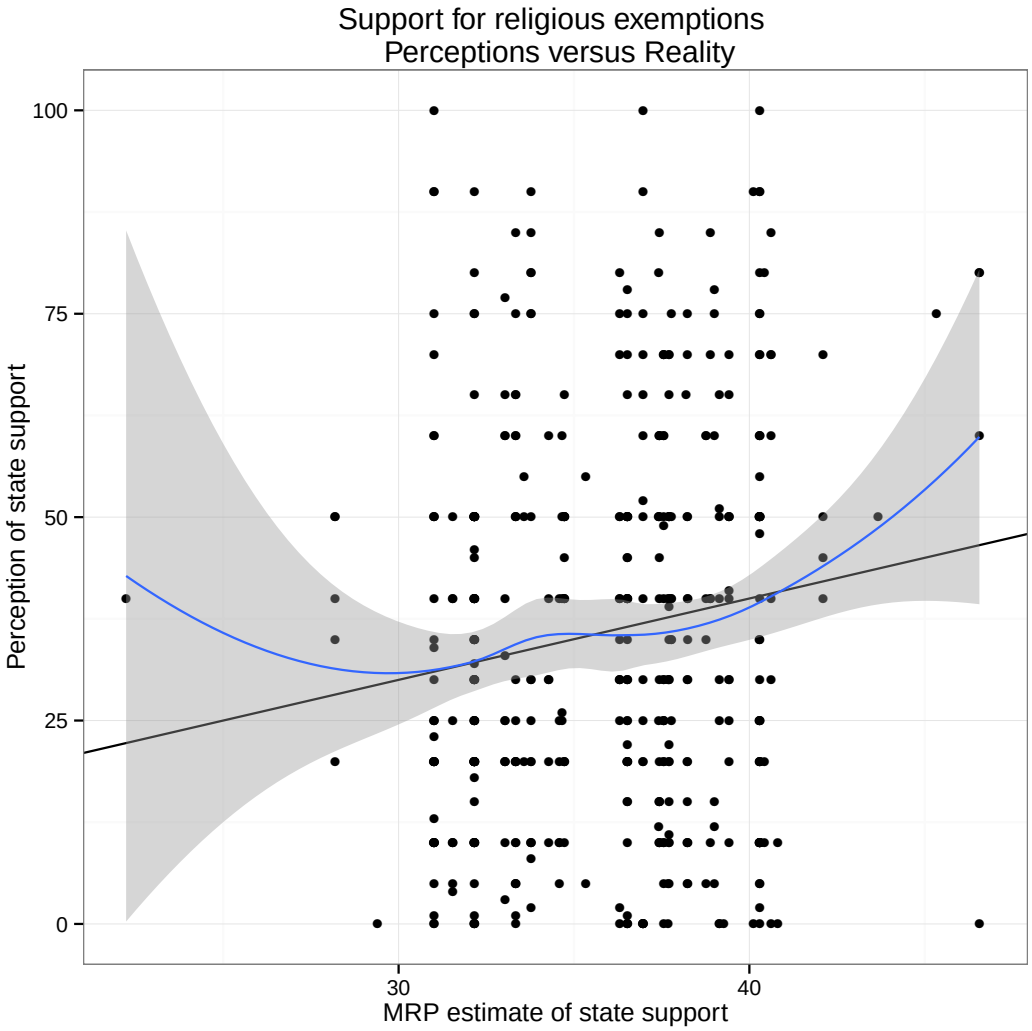
Statement: “Grant legal status to all illegal immigrants who have held jobs and paid taxes for at least 3 years, and not been convicted of any felony crimes." Mean absolute error: 39.69 percentage points. Correlation: 0.21

Figure 6.3: Public perceptions of state-level support for relaxing gun control laws.



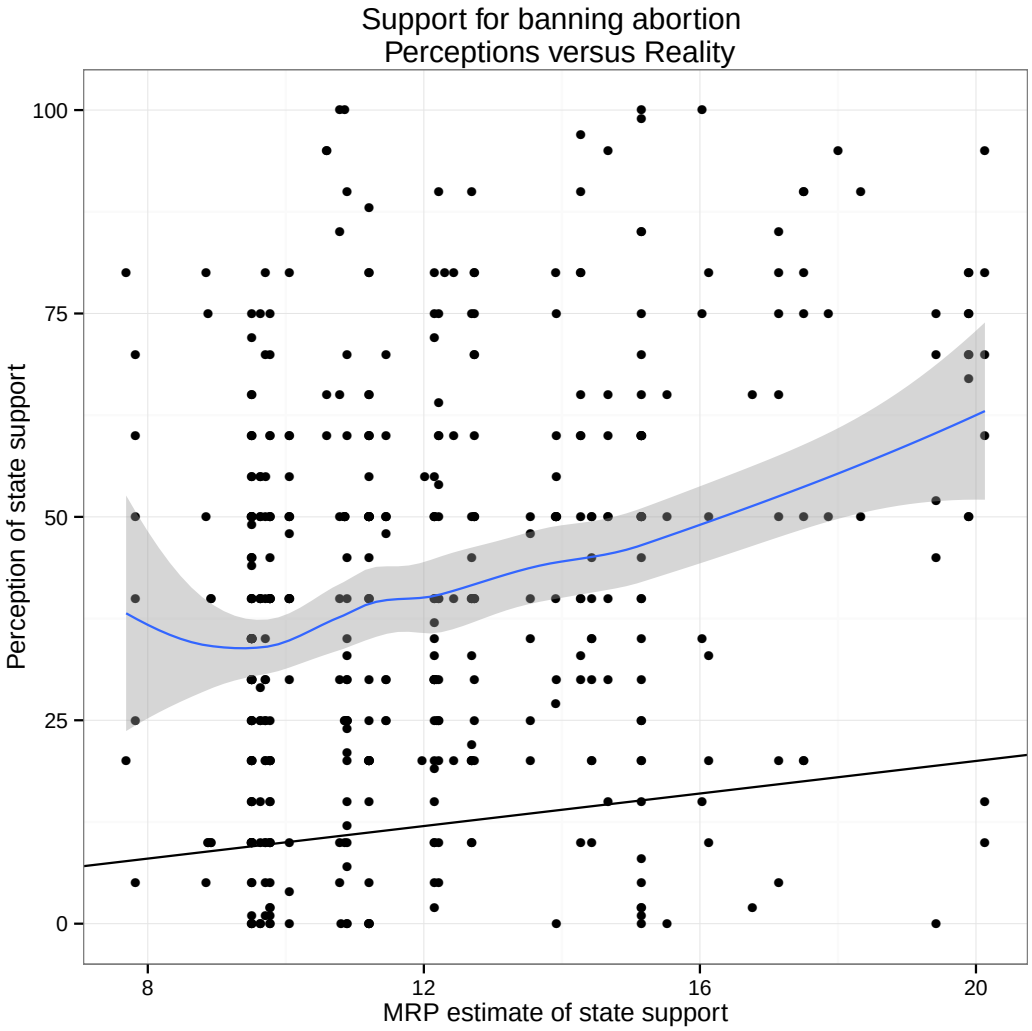
Statement: “Laws covering the sale of firearms should be made less strict than they are." Mean absolute error: 42.05 percentage points. Correlation: 0.13.

Figure 6.4: Public perceptions of state-level support for allowing religious exemptions in health care.



Statement: “Let employers and insurers refuse to cover birth control and other health services that violate their religious beliefs." Mean absolute error: 35.15 percentage points. Correlation: 0.13.

Figure 6.5: Public perceptions of state-level support for banning abortion in all circumstances.



Statement: “By law, abortion should never be permitted." Mean absolute error: 40.41 percentage points. Correlation: 0.28.

A few trends are immediately evident. The y-axes have a much wider range than the x-axes, meaning that there was much more variance in the public's estimates than cross-state variation in true opinion. A few respondents guess that 0% or 100% of their state support a policy, raising questions about whether all of them took the task seriously. However, the vast majority of the responses are in a range that suggests they are sincere guesses.[2] This dispersion is the result of most respondents being very inaccurate–on each issue, the mean absolute error is around 30-40 percentage points.

Despite these serious misperceptions, respondents are not randomly guessing. On all of the issues, the correlations between guesses and state opinion are positive and often strong. These relationships suggest that people are modestly aware of their states' preferences. To be sure, most of the guesses are quite inaccurate, but the positive correlations suggest that true opinion is influencing people's perceptions to some degree.

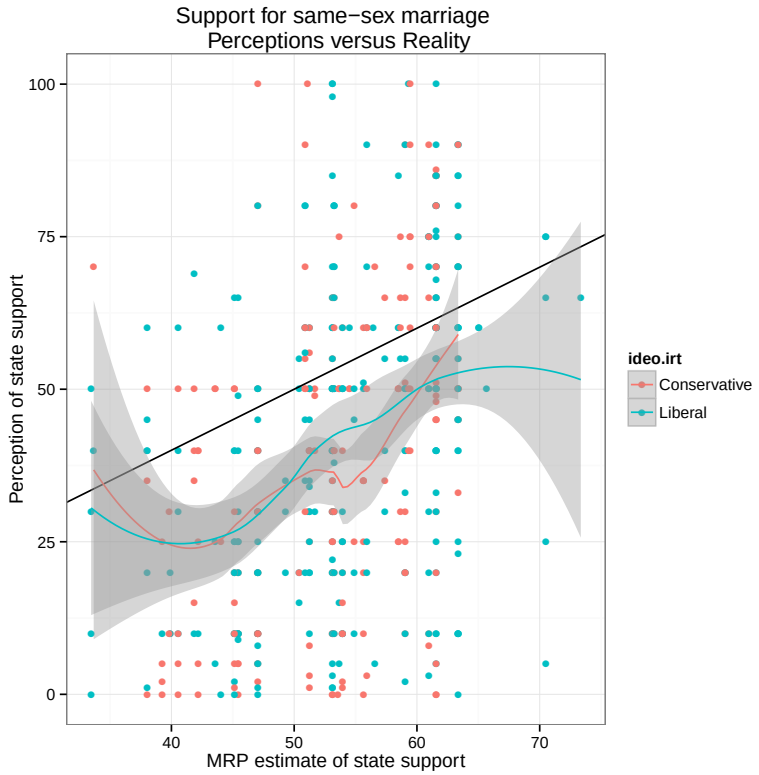
Third, the public's average responses on most of the issues are biased in a conservative direction, similar to Broockman and Skovron's (2014) findings with state legislative candidates. On a religious exemption for birth control, the public is fairly accurate *on average*, but this masks the wide dispersion in the data. On same-sex marriage, gun control, immigration, and banning abortion, the public tends to overestimate support for the conservative issue position, despite the fact that these issues vary widely in how much support the conservative position commands. Again, there is wide variance in the guesses on these issues, but the central tendency is to overestimate support for the conservative position. This is despite the fact that these issues had very different levels of overall support.

To investigate these patterns of misperceptions more, I divide the sample by party and by ideology. To construct estimates of ideology without using self-reports, I fit an item-response model to the issue questions that were asked in the survey and divide the respondents into liberal and conservative based on which side of the midpoint they fall. More detail on this procedure is in the Appendix. Broockman and Skovron (2014) find an ideology asymmetry with their sample

[2]The survey contained two attention checks, and respondents who failed them were removed.

of candidates for state legislature, as conservatives having strong “looking-glass" perceptions but liberals do not similarly overstate support for their own positions. In this case, though, ideology does not moderate people’s perceptions. On all of the issues, there is no statistically significant difference in the perceptions of liberals and conservatives. To illustrate, I present figures for the marriage and immigration items, although the other items have very similar results.

Figure 6.6: Public perceptions of state-level support for same-sex marriage by ideology.



Respondents classified as conservative or liberal by which side of the

Similarly, party does not seem to moderate people’s perceptions. On all five issues, dividing the sample into Democrats, Republicans, and pure Independents shows no major differences in average perceptions, as shown in Fig. 6.8 and Fig. 6.9. The blue line represents Democrats, the red line Republicans, and the green line pure independents.

Across these issues, respondents were quite inaccurate in their estimates of opinion in their states. However, the modest correlations between their estimates and true opinion suggest that

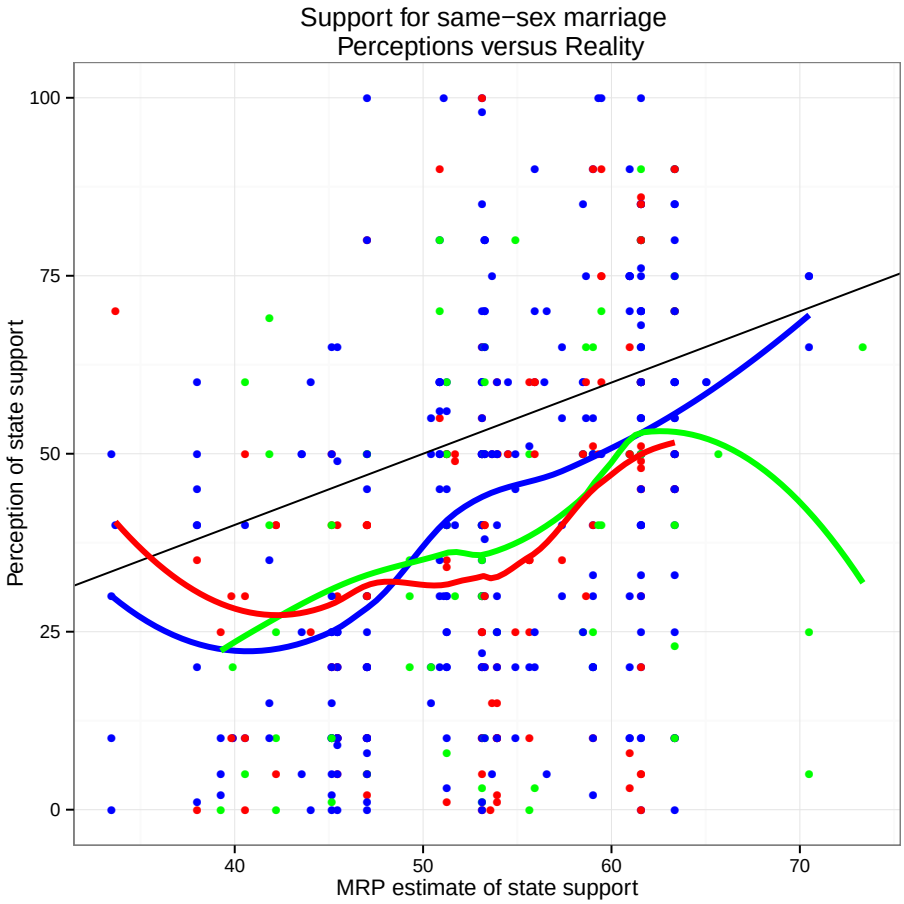
Figure 6.7: Public perceptions of state-level support for amnesty for undocumented immigrants by ideology.

people are, on average, at least dimly aware of the political leanings of their state. Much like elites, a majority of people also overstated support for conservative issue positions. However, unlike elites, these perceptions were not significantly moderated by party or ideology. While we might expect liberals, subject to motivated reasoning, to overstate support for their positions, this does not seem to be the case. Instead, liberals join conservatives in believing that conservative positions are more popular than they actually are.

CAN CORRECTING FALSE BELIEFS INFLUENCE POLITICAL BEHAVIOR?

We have seen that the public has inaccurate beliefs about public opinion. However, one might object that these misperceptions are not particularly consequential. Unlike legislators, the average member of the public might not have much reason to pay attention to public opinion, so their

Figure 6.8: Public perceptions of state-level support for same-sex marriage by party.

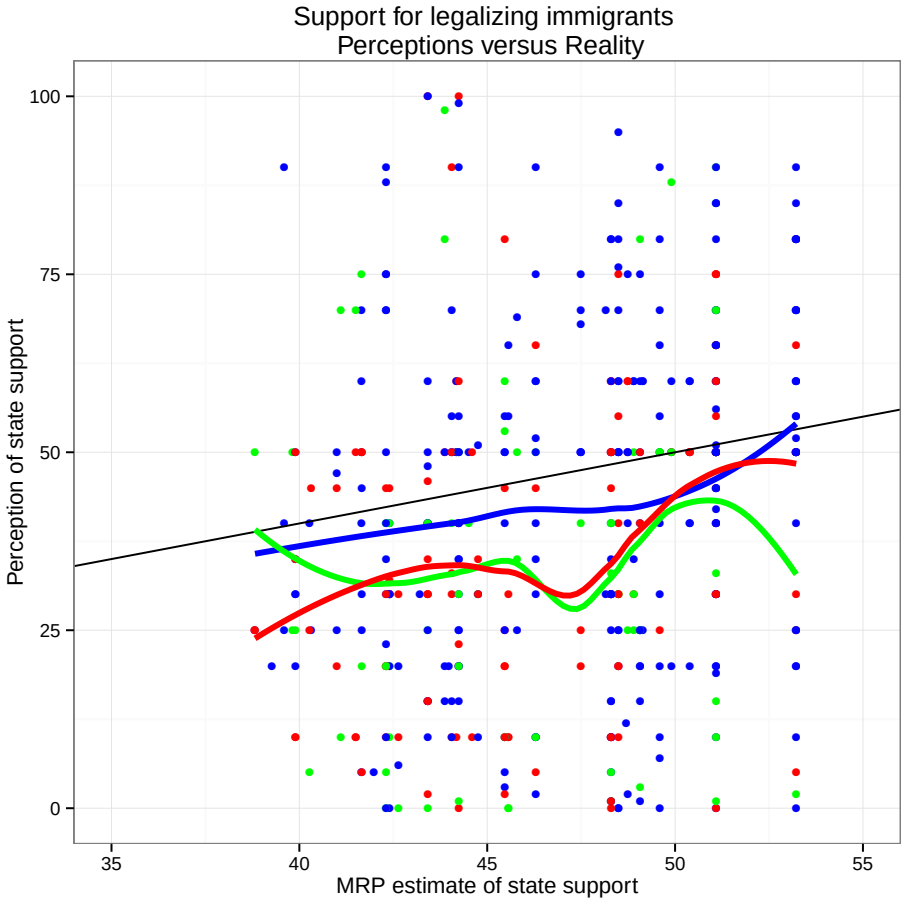


perceptions might not be important.

To test this issue, this section of the paper seeks to identify whether correcting false beliefs about public opinion can strengthen or weaken people's attitudes and/or change their behavior. On one hand, research in psychology and behavioral economics consistently finds that social proof is persuasive for changing behaviors and opinions. However, the results from the first section suggest that, if people do respond to public opinion as a source of social pressure, they respond to an inaccurate view of what their peers believe. Thus, an easy test for the influence of social perceptions on public opinion is to expose people to corrective information.

For corrections to have a meaningful effect on people's opinions and behavior, subjects must not reject the corrections. However, in politicized contexts, people are likely to reject corrective

Figure 6.9: Public perceptions of state-level support for amnesty for undocumented immigrants by party.



information that counters their original beliefs, and such corrections often backfire (Nyhan and Reifler 2010). Thus, we might have competing expectations about the efficacy of correcting misperceptions of public opinion. Thus, I expect that only people who are told that their positions are more popular than the initially believed will respond to the treatment by increasing in attitude strength and willingness to express their positions. I expect respondents who are told that their positions are not as popular as they initially believed will not react to the correction.

Study One

This study uses a simple numerical correction, presenting respondents with accurate opinion data from their state.

In a similar study, Rothschild and Malhotra (2014) expose respondents to false poll results on three issues: reducing US troop levels in Afghanistan, more free trade agreements with North, Central, and South America, and public financing of elections. They test one outcome variable, support for the issue. The treatment consists solely of a false poll result, randomly drawn between 20 and 80%, for the national support for the issue. They conclude that polls can be "self-fulfilling prophecies," causing people to shift their opinions to reflect what they are told is majority opinion.

This study differs in three important ways. First, the corrections are more naturalistic—I use the same actual state opinion estimates that I used in the observational study above. This design complicates the randomization of the experiment, but it does not require deception or provide respondents with implausible information. Second, I take into account respondents' prior perceptions in my analysis, having asked them to estimate support for each issue pre-treatment. Third, I expand the analysis to additional outcome variables.

The data for this study come from Amazon Mechanical Turk.(n = 634, 387 men, 530 whites, 278 Democrats, 110 Republicans). Respondents were randomly assigned to one of three issues – same-sex marriage, amnesty for undocumented immigrants, or gun control. Among other questions, I asked them to estimate the percent of people in their state who supported each of the three issues. Those in the treatment group were then exposed to a block of large text that gave the estimated support in their state, attributed to an academic survey. The control group proceeded directly to the outcome variables.

I tested three outcome variables. The first was a five-point Likert scale on the issue the respondent was assigned to. The second outcome, inspired by Noelle-Neumann's (1974) "train problem," asked the respondent to imagine him or herself in a conversation with a neighbor or coworker in which the other person expressed an opinion about the issue that the respondent

disagreed with. The question asked them to imagine whether or not they would argue in favor of their opinion. A third, more behavioral outcome measure, asked respondents whether they would like to receive information at the end of the survey about contacting their member of Congress to express their views. Only 7.3% of the sample took advantage of this opportunity.

As expected, there was no main effect of the treatment, as different respondents were being exposed to corrections that indicated that their positions were more or less popular, and the variation in the corrective information should cancel itself out. However, even when we analyze subsamples of people who were corrected in a positive direction (that their position is more popular than they believed) or a negative direction (that their position is less popular than they believed), there is no discernible effect of receiving the corrective information. Table 6.1 displays the results of difference of means tests for these groups. The control groups in the second two rows consist of respondents who would have received positive or negative corrections if they had been assigned to treatment. Overall, there is no evidence that the corrections influenced attitude strength. Results for the behavioral outcomes are similarly null.

Table 6.1: Treatment effects for five-point attitude strength items. All variables scaled from zero to one.

	95% confidence interval of difference in means
Entire sample	(-.02, .10)
Positive correction	(-.03, .15)
Negative correction	(-.06, .10)

Beyond simply the direction, does the magnitude of the correction matter? Social proof theory would predict that people who incorrectly believed their positions were unpopular would be reassured by information that their position is actually popular. Table 6.2 presents results that take into account the fact that different respondents were exposed to corrections of different magnitudes and in different directions. I fit regression models to the data to account for the fact that the treatment varied across respondents because the magnitude and the direction of the correction varied based on the respondent's initial estimate of support for the issue. The key variable is the interaction of the treatment (correction) and the magnitude of the difference between the

respondent's estimate and true public opinion, which has been rescaled so that higher values reflect corrections that tell respondents that their own position is more popular than they believed. In general, the results suggest that the corrections did very little to influence people's opinions or behavior.

None of the treatment effects are statistically significant in the models predicting the behavioral outcomes. In the opinion regression, the effect of a correction that tells people there positions are more popular actually made them agree *less* with the position, contrary to what the theory predicts. Moreover, this effect is present even when not interacted with the treatment. However, control respondents did not see the correction, which suggests that it is likely that people's original estimates of public opinion were sticky, and that people who received a strong positive correction for their position are actually just reacting to their initial misperception that their position was unpopular and thus are less strongly supportive.

Figure 6.10 plots the effect of the magnitude of the correction on opinion. The left hand panel is a placebo test, plotting the marginal effect of the correction those respondents *would have seen* if they were treated. The right hand side is the actual effect of the magnitude in the treatment group. This evidence is suggestive that the treatment was not strong enough to correct people's misperceptions. While the intercept shift in the treatment group provides modest evidence that receiving good news about the popularity of one's position boosted people's attitude strength, the negative slope is highly suggestive that people's attitude strength remained more influenced by their prior perceptions of public opinion than by the correction.

In this study, correcting people's misperceptions about public opinion in their states did not seem to affect their opinions or willingness to act politically.

Study Two

Why might people not have responded to the corrective information of Study One? While design issues may have prevented people from internalizing the information about opinion in their states, it is possible that the conditions for social influence to affect their opinions may not have been met.

Table 6.2: Results from corrections experiment.

	Attitude strength	Write to Congress	Debate
(Intercept)	0.538^*	-2.351^*	0.859^*
	(0.044)	(0.440)	(0.254)
Perception	0.001	-0.007	-0.002
	(0.001)	(0.008)	(0.005)
Treated	0.037	0.125	0.155
	(0.031)	(0.325)	(0.179)
Magnitude of correction	-0.002^*	0.005	-0.003
	(0.001)	(0.010)	(0.005)
Treated*correction magnitude	0.001	0.003	-0.001
	(0.001)	(0.013)	(0.007)
N	624	623	599
R^2	0.021		
adj. R^2	0.015		
Resid. sd	0.380		
AIC		330.345	744.229
BIC		419.036	832.135
$\log L$		-145.173	-352.115

Standard errors in parentheses

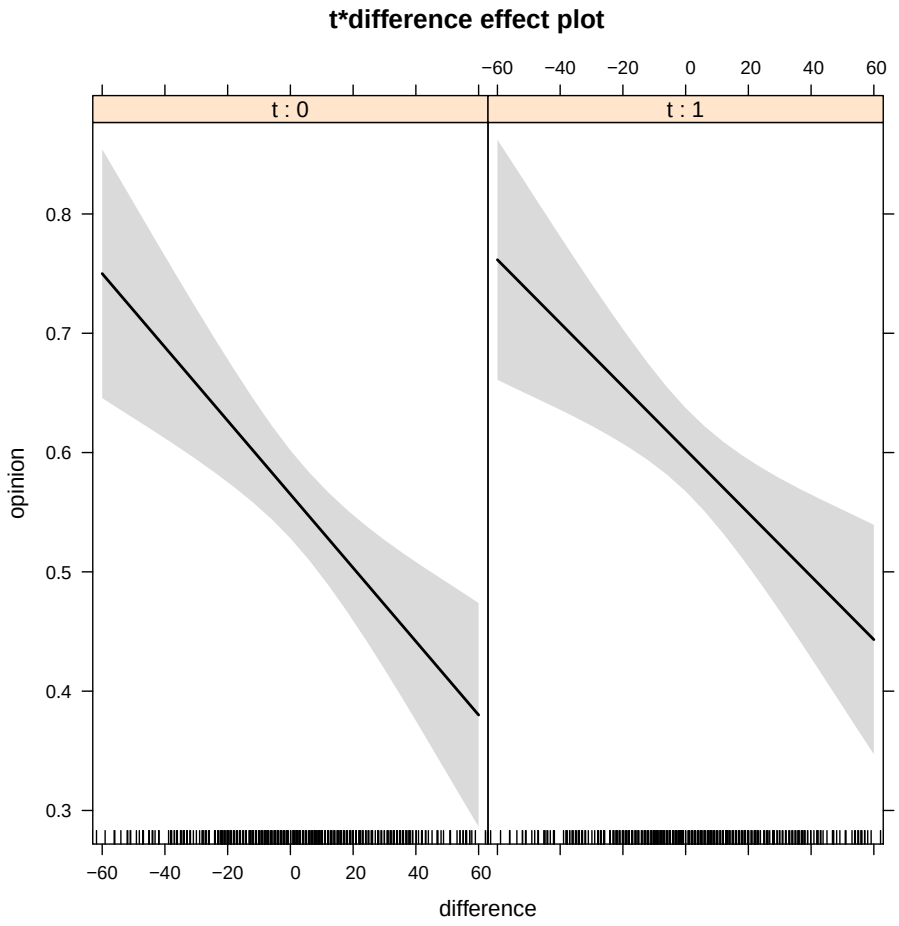
* indicates significance at $p < 0.05$

The first column reports results for an OLS model of the five-point Likert item. The second column is a logit model for desire to receive information on writing to Congress, and the third column is a logit model predicting willingness to defend one's opinions to a friend or coworker.

To test for that possibility, I conducted a similar study, again on Mechanical Turk ($n = 387$).

Study Two investigates the effect of information about public opinion within one's own party. The design of this study is very similar to Study One. However, the target group of the corrections has been changed to be the respondent's own party, or to other independents for independents. People may not feel socially attached to the entire electorate, but partisanship does function as a social attachment (Campbell, Converse, Miller and Stokes 1960; Green, Palmquist and Schickler 2002) that might be more persuasive in a politicized context. Being an independent may function more as a rejection of a social identity, but I hypothesize that independents may be subject to the same kinds of social influence as partisans. As in Study One, respondents in the treatment group were exposed to a large block of text that contained a result from a recent national poll, although this time the value presented was support for the issue within their party (or independents), not

Figure 6.10: Effects of the magnitude of corrections on opinion.



x-axis: Correction measured as respondent's perception of support for own position - true support for own position.

within the state. The issues in this experiment, as well as support for each one in each partisan group, are reported in Table 6.3.

Table 6.3: Issues and support levels in Study Two.

Issue	Democrat support	Republican support	Independent support	Source
Fracking	26%	66%	35%	Gallup
Path to citizenship	87%	69%	75%	CBS
Marijuana legalization	60%	34%	55%	CBS

Thus, respondents assigned to the immigration condition would see generally high levels of support, while those in the other two conditions would see low or moderately high levels depending on the issue. As in Study One, the design should not find a main effect of being assigned to

treatment, as different respondents are exposed to different values of support in their party. Thus, I divide the sample into those who would have seen that a majority of their party supports the issue and those who would have seen that a majority of their party opposes the issue. (Even control respondents were assigned to an issue, so they have a hypothetical value for the treatment.) Table 6.4 shows that there is no treatment effect in the entire sample. Those who saw that a majority of their party supported the issue were slightly more favorable toward it than similar people in the control condition, though not statistically significantly ($p = 0.42$). However, those who were exposed to information that their party opposed an issue were less supportive of the policy than respondents in the control who would have seen similar information. This group includes Democrats and independents in the tracking condition and Republicans in the marijuana condition.

Table 6.4: Treatment effects for five-point attitude strength items. All variables scaled from zero to one.

	95% confidence interval of difference in means
Entire sample	(-.07, .07)
Majority of party supports	(-.07, .17)
Majority of party opposes	(-.03, -.25)

The behavioral outcomes (willingness to engage in debate and desire to contact legislators) did not have any statistically significant treatment effects. This study thus provides some evidence that people respond to seeing that their party opposes issues by becoming more strongly opposed themselves, although further evidence is certainly needed to establish the relationship more strongly.

DISCUSSION

Members of the public have very inaccurate beliefs about public opinion in their states, and evidence suggests that, on average, they are prone to the same conservative biases that color elites' misperceptions of public opinion. However, a preliminary attempt to correct those beliefs with real public opinion data seemed not to move people's opinions or willingness to act. At this point, I do not have sufficient evidence to disentangle whether respondents ignored the correction or

whether their perceptions of public opinion play no role in their decision making to begin with. Evidence from the observational study, though, suggests that most people have very inaccurate perceptions of public opinion on the central issues of American politics, and that these perceptions have similar biases to those of elites. Moreover, just as in the case of elites, liberals and Democrats do not overestimate support for their own positions. Among the public, party and ideology do not moderate perceptions in the way that they do for elites.

The experimental results provided mixed findings on whether these misperceptions can be corrected and, more broadly, of the potential impacts of people's beliefs about public opinion on their attitudes and behavior. Correcting people's misperceptions with information about the true value of opinion in their states seemed to have little influence. However, people did seem to respond to information that members of their party opposed policies by becoming more opposed themselves. Perhaps unsurprisingly, average Americans are not well aware of the distribution of opinion among their fellow citizens, but the possibility that their perceptions could influence their beliefs makes these severe misperceptions potentially consequential.

Chapter 7

Conclusion

In this dissertation, I returned to the question of what politicians believe about public opinion, a crucial element of representation. I found evidence of asymmetries in how state legislative candidates and county party leaders perceive their constituents. These perceptual asymmetries suggest that state-level American politicians believe they are representing a fundamentally different group of constituents than they actually are, and the misperceptions have potential consequences for representation in American politics. However, the central empirical finding of the dissertation represents a significant and unresolved puzzle. What explains why contemporary state legislative candidates and county party leaders have asymmetric misperceptions of their constituents' preferences on so many issues? In short, the dissertation lacks a causal explanation for politicians' misperceptions. The studies in this dissertation do not point to a single "smoking gun" explanation for the observed patterns of misperceptions, but pieces of the evidence I have collected in the NCS and NSPL provide initial insight into how state-level politicians relate to their districts and how informational and perceptual biases influence their perceptions of public opinion. To conclude the dissertation, this chapter highlights some of those findings and looks ahead to future directions in my research agenda.

RULING OUT POSSIBLE CAUSES OF ASYMMETRIC MISPERCEPTIONS

The empirical analysis in Chapter 4 of the dissertation focuses on the mechanisms behind the finding that that David Broockman and I uncovered in Chapter 3 – why do state-level American

politicians have asymmetric misperceptions of their constituents' preferences? In Chapter 4 and Chapter 5, I used results from the elite surveys to investigate possible mechanisms behind state-level politicians' asymmetric misperceptions of public opinion, and I expanded my analysis to include local party leaders' perceptions. The evidence from our surveys points away from some possible explanations of asymmetric misperceptions. This section reviews some possible causes of misperceptions of public opinion that I or others have hypothesized may cause the observed pattern of asymmetric misperceptions, but which lack compelling supporting evidence.

One set of possible explanations relates to various kinds of differential responsiveness. A large body of empirical evidence suggests that politicians do not treat all constituents equally in constituent service and that the views of different groups correlate with policy outcomes with different strength. It is less clear, however, that this evidence implies that politicians' *perceptions* of public opinion would be shaped by these groups. My survey items ask candidates to estimate public opinion among all people living in the district. Of course, candidates might unconsciously be influence by the constituents about whom they think most often (Tversky and Kahneman 1973*b*), so it is useful to consider whether candidates are more accurate in perceiving potentially politically powerful groups than they are in perceiving the district as a whole. In Table 7.1, I analyze support for items I study from the 2014 CCES among the general public, among voters the CCES records as being validated as having voted in the 2014 general election, among respondents reporting a family income above $120,000, and among whites only. The latter three groups are all ones that might be hypothesized to have disproportionate influence on policymaking.

Politicians are not only responding to the wealthy or the donor class.

Several prominent studies have pointed to differential responsiveness to income groups as a key representational inequality in contemporary American politics. By this telling, American politicians only respond to the preferences of wealthy Americans, whose campaign donations and other sources of privilege keep them in

In Table 7.1, I break down support for the items in the Chapter 3 study from the 2014 CCES

Table 7.1: Support for issue items in 2014 CCES among subsets of voters.

Issue	National weighted support	Support among validated voters	Support among over $120,000	Support among whites
"Allow gays and lesbians to marry legally."	56%	54%	67%	59%
"Let employers and insurers refuse to cover birth control and other health services that violate their religious beliefs."	43%	47%	41%	42%
"Require background checks for all gun sales, including at gun shows and over the Internet."	87%	86%	87%	87%
"Ban assault rifles."	61%	60%	64%	62%
"Allow police to question anyone they think may be in the country illegally."	37%	41%	34%	40%
"Grant legal status to all illegal immigrants who have held jobs and paid taxes for at least 3 years, and not been convicted of any felony crimes."	47%	46%	52%	44%
"Always allow a woman to obtain an abortion as a matter of choice."	57%	54%	65%	58%

by income group. The CCES income measure is very fine-grained, so I collapse respondents who reported a family income of over $120,000 into one group of "high-income" citizens, representing about ten percent of the raw sample of the CCES. Simply put, not all of the issues in my study are ones on which income predicts opinions particularly well. As Branham, Soroka and Wlezien (2017) point out, a relatively small number of national policy controversies are ones on which high-income, middle-income, and low-income citizens disagree strongly. The issues on which Broockman and I queried politicians' perceptions fall into this group — they are not issues about which high-income people consistently disagree with the rest of the public, and they are certainly

not ones on which high-income people are systematically more likely to take the conservative position.

There are additional ways to implement an analysis of this sort, and the measurement of who counts as “wealthy" or “affluent" is an active area of debate in the literature. However, the evidence suggests that differential responsiveness to citizens of different income levels is not a primary driver of the asymmetric misperceptions I find in my study. In future work, it would be useful to query politician’s perceptions of public opinion on issues that are more divisive among people of different income groups.

Are politicians only responding to their white constituents?

My dissertation mostly did not engage with the role of race and ethnicity in representation, but future work should address the extent to which politicians’ perceptions of public opinion in their districts are biased toward the opinions of citizens from traditionally privileged racial/ethnic groups. Evidence suggests that state legislative offices in the aggregate are biased against Black and Latino constituents in the provision of constituent services (Butler and Broockman 2011) but that Black legislators are more responsive to Black constituents (Broockman 2013). As in the case of income, though, race is not a consistently strong predictor of attitudes on these items. The opinions of whites across these issues is usually quite similar to that of the public overall. Moreover, the plots in our MRP analyses show that the pattern of asymmetric misperceptions holds across the ideological spectrum, from very conservative districts that are likely to be heavily white, to more ideologically heterogenous and liberal districts.

Politicians are not only responding to voters.

Another possible explanation for misperceptions of public opinion might be that politicians respond only to likely voters, and even though my survey items ask them to estimate opinion among all citizens, they are estimating public opinion with a bias toward likely voters’ opinions. Theories of representation often focus on the role of electoral sanction in pushing politicians to

be responsive to public opinion. A strategic politician may think more about constituents who he perceives as likely to vote, making them more accessible when he or she thinks about the district as a whole.

To account for this possibility, Broockman and I built in an analysis of responsiveness to voters only into our study in Chapter 3. We re-estimated public opinion using opinions from only respondents that the 2014 CCES verifies as having voted in the general election, then re-estimated the accuracy of politicians' misperceptions of public opinion using this alternate measure of "true" public opinion. As shown in Table 7.1, our results for state legislative candidates' misperceptions of public opinion hold for each issue even if we estimate public opinion using responses form only validated voters in the CCES. On these issues, the CCES does not suggest that the opinions of voters and nonvoters diverged significantly enough in 2014 to explain the broad misperceptions that we found.

While *actual* differences in opinion between voters and nonvoters are not large enough to explain our findings, further work should consider the extent to which *perceived* differences between voters and non-voters drive politicians' responsiveness to public opinion. I designed the conjoint experiment in Chapter 4 in part to address this issue. The results suggest that politicians believe that conservative or Republican citizens are more likely to vote, and this perception might weigh into their evaluation of public opinion in the geographic constituency by bringing conservative citizens to the top of their mind. Future work should investigate in more detail to whom politicians believe they must be responsive and the role of the availability heuristic in candidates' perceptions of their districts.

The results are not confined only to successful or high-quality candidates.

The findings of asymmetric misperceptions are not just an artifact of the survey responses coming from many unserious or low-quality candidates. In Figure 3.8, Broockman and I estimated a regression including a number of predictors of error in perceptions of public opinion, including state legislative professionalism and incumbency. As we might predict, incumbents, candidates

running in states with more professionalized legislatures, and candidates running in more competitive districts are more accurate in their perceptions. These marginal effects are small but statistically significant; I estimate that an incumbent is between 1 and 2 percentage points more accurate than a nonincumbent. These results suggest that higher-quality candidates make smaller errors, but the pattern of asymmetric misperceptions does not disappear in professionalized states or competitive legislatures (see Table 4.7).

Are elites committed to democratic principles?

Another possible explanation for asymmetric misperceptions that is not tested elsewhere in the dissertation is that the asymmetries arise not from politicians' information environments, but from asymmetries in their commitment to democratic principles and/or to the trustee model of representation. If Democrats believe more strongly that their role as representatives is to faithfully translate public opinion into policy than Republicans do, they might pay closer attention to public opinion and perceive it more accurately.

Asymmetries in commitment to democratic principles have been observed among the mass public and political elites in the past (McClosky and Zaller 1984), with conservatives more willing to endorse what might be considered violations of democratic norms, especially related to free speech. Recently, scholars and observers have raised concerns about the potential for Donald Trump's presidency to erode democratic norms and institutions. The possibility that belief in democratic norms has recently been a subject of considerable debate, particularly because of a prominent analysis of World Values Survey data that suggested that young people globally are less committed to democratic principles than past generations (Foa and Mounk 2016). However, additional analyses of these data questioned Foa and Mounk's (2016) interpretation (Inglehart 2016).[1]Nevertheless, recent global events have highlighted the issue of whether democratic norms such as responsiveness to public opinion are important to political elites.

[1]See a discussion by Erik Voeten in THE MONKEY CAGE at https://www.washingtonpost.com/news/monkey-cage/wp/2016/12/05/that-viral-graph-about-millennials-declining-support-for-democracy-its-very-misleading/?utm_term=.071625e0c57d

Several items on the 2012 NCS and the NSPL are helpful for a preliminary examination of elites' commitment to certain democratic norms. These items were designed by Nick Carnes as part of an investigation of cynicism among political elites. Carnes (2016) finds that elites with more experience holding office tend to be less cynical than those with less experience. However, Carnes does not find significant partisan differences in endorsement of the cynicism items, suggesting that differential cynicism among elites does not explain asymmetric misperceptions. In short, it doesn't seem to be the case that Republicans "think they can get away with it" while Democrats fear voters will hold them accountable if they take extremist positions. These items were designed to focus on cynicism, so they are not a perfect fit for studying the broader issue of politicians's attitudes toward democratic norms and their representational roles. However, they do give some insight into how politicians perceive some of the mechanisms on which democratic governance relies. In future studies, I plan to more carefully examine candidates' view of their role as representatives, including more detailed measurement of their attitudes about whether they view themselves as trustees or delegates.

CONNECTING ELITES' AND THE PUBLIC'S MISPERCEPTIONS OF PUBLIC OPINION

While most of the studies in the dissertation focused on political elites, I also considered ordinary citizens' perceptions of public opinion in Chapter 6. In future work, I plan to expand my analysis of perceptions of public opinion among the general public. Ordinary citizens' perceptions of public opinion are an indicator of how the broader political information environment shapes the perceived prevalence of particular political attitudes, but they arise under a different set of informational conditions. Members of the public have far fewer incentives than politicians to become informed about public opinion, and they have access to perceptions of public opinion.

However, understanding both groups perceptions help us to develop a fuller picture of the ways in which various sources of political information can shape perceptions of public opinion.

Future work should also consider the extent to which elites' and the public's misperceptions of public opinion may feed back on each other. If liberal citizens feel outnumbered and depress their participation as predicted by the spiral of silence, elites may perceive them as being less numerous than they actually are, exacerbating biases in representation. Connecting how misperceptions among these two groups could exacerbate perceptual biases should be a direction for future work.

AN AGENDA FOR FUTURE WORK ON PERCEPTIONS OF PUBLIC OPINION

This dissertation used original data sources to reintroduce the study of politicians' perceptions of public opinion to the research agenda in political science. These findings raise additional questions about how politicians form their perceptions of public opinion and how these perceptions influence politicians' decisions. Future work should address these questions, using surveys and/or other methods. In this section, I review some of the limitations of this dissertation and outline directions for future research.

Limitations of this dissertation

My dissertation advances the study of politicians' perceptions of public opinion, but, like any study, it has important limitations that I hasten to note. In this section, I review some of these limitations and argue that, as a mostly descriptive project, this dissertation should be taken as a jumping-off point for future studies of perceptions of public opinion in American politics.

General limitations of survey studies. As mentioned in Chapter 2, my reliance on surveys comes at some cost. While our surveys achieve a response rate that is considerably higher than many surveys of the general public, my findings rely on responses from only 18-20% of the eligible populations of candidates and of party leaders. In an effort to analyze the representativeness of my samples and to evaluate the possible generalizability of my results, I have presented analyses of representativeness in Chapters 3 and 5 that split the sample on variables likely to be important moderators of my findings, such as party, ideology, incumbency, and whether candidates won their elections. When the analyses are conducted on subsets of the data, our general findings hold,

although the magnitude of some estimates are attenuated. Future work could use more non-survey measures to alleviate concerns over potential biases arising from the limitations of survey methods.

Survey population limitations and generalizability to other political elites. Our surveys focused on state legislative candidates and on county party leaders. While both of these groups make consequential political decisions, they are not representative of the entire population of elected officials in the United States. As such, this dissertation cannot speak to whether my findings would generalize to members of Congress or other kinds of political elites. Further work should attempt to address the extent to which these patterns of misperceptions generalize to other political elites, but extending the research to members of Congress will require considerable effort to secure the cooperation of politicians.

The lack of economic issues. The analysis in this dissertation largely does not include economic issues, particularly those related to taxes and redistribution. The CCES contained more suitable items on social issues than on economic issues in 2012 and 2014. The relative lack of attention to economic issues is a major limitation of this dissertation—economic issues are one of the most important cleavages in American politics. In 2016, my team conducted a new version of the NCS. This survey included additional items on politicians' perceptions of public opinion on economic issues including the minimum wage, tax rates, single-payer healthcare, and trade. My analysis of candidates' perceptions on these issues will add important breadth to the studies.

Robustness over time and thermostatic responses

A key limitation of my analysis is that it covers only a short period of time, during which some important attributes of the political system remained constant. For example, In both the 2012 and 2014 elections (as well as in 2016, from which I have additional data), a Democrat was president. Thus, I cannot analyze the extent to which thermostatic reactions to a Republican president might influence perceptions of public opinion. In 2018, I will have the first opportunity to collect state legislative candidates' perceptions of public opinion during a Republican presidential administration. The surveys all took place after the Tea Party movement came to prominence (Skocpol and Williamson 2011), potentially shifting the patterns of grassroots engagement that

Broockman and I hypothesize drove some of the asymmetry that we find in 2012 and 2014. It would be helpful to have good measurements of elites' perceptions of public opinion from earlier time periods; unfortunately there are not many suitable studies. I plan to continue to collect data in the coming years, which will help address the robustness of my findings to changing conditions over time.

Directions for future work

This dissertation and the associated papers reintroduced the study of politicians' perceptions of public opinion to the agenda in political science. It represents the beginning of a research agenda on how politicians form their perceptions of public opinion and how those perceptions shape representation. This agenda has potentially broad implications for the conduct of American politics. Elmendorf and Wood (2017) argue that the accumulation of empirical evidence of politicians' misperceptions means that election-law reform efforts should focus on informing elites as part of their goals of increasing transparency. They also note, though, that the increased quality and availability of detailed voter files could facilitate more precise gerrymandering, a potential adverse consequence of increased elite knowledge about voters. Adapting to a new technological environment, in which big data allows for even more precise estimation of public opinion, will shape how politicians connect to their constituents.

Further research should continue to consider how politicians form their perceptions of public opinion and why these perceptions matter for democratic governance. First, the causes and consequences of asymmetric misperceptions of public opinion among political elites must be examined in greater depth. Second, as emphasized by Elmendorf and Wood (2017), ways to leverage new technologies in the measurement and communication of public opinion in order to inform elites should be considered. Finally, researchers and activists interested in questions related to representation should pay close attention to the role of perceptions in shaping important political outcomes. Politicians are people, too, and their biases have potentially serious consequences for the health of American democracy.

Appendices

Appendix A

Appendix to Chapter 3, Coauthored with David E. Broockman

FIGURES AND TABLES

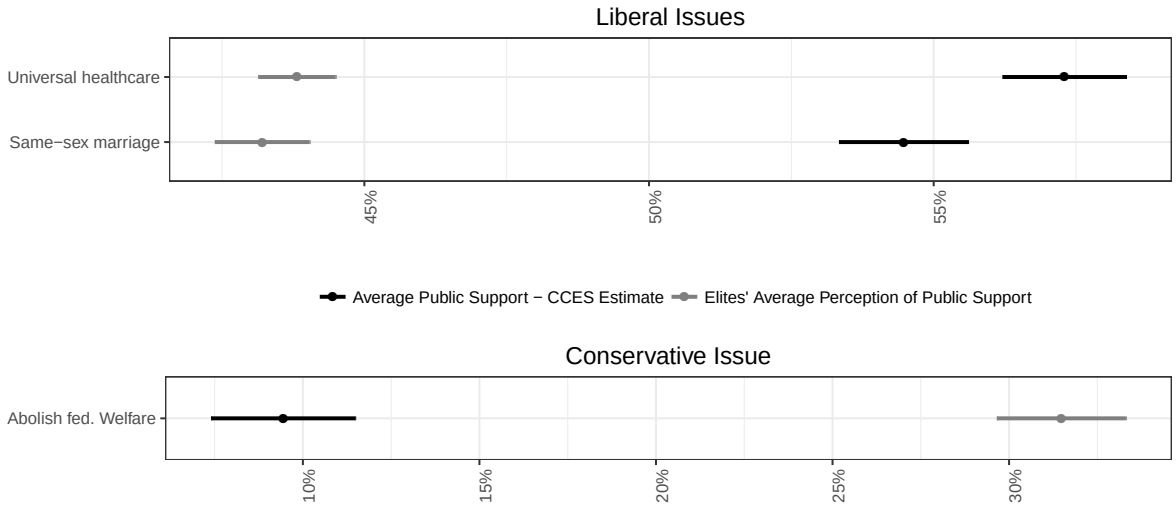
Table A.1: Self-reported rates of contacting legislators by party.

Source	ANES				CCES	ANES
Year	1980	1984	1988	1992	2008	2012
% of Democrats Who Contacted MC	14.9%	13.8%	12.8%	14.6%	26.1%	18.0%
% of Republicans Who Contacted MC	16.3%	15.3%	12.4%	12.9%	36.3%	23.1%
Republican advantage in contacting legislators	9.4%	10.9%	-3.1%	-11.6%	39.0%	28.1%

Table A.2: Politicians' mean error across all issues, broken down by ideology.

Self-reported ideology	Mean misperception across issues
Extremely conservative	28.2
Conservative	24.6
Slightly conservative	20.8
Moderate	18.6
Slightly liberal	16.4
Liberal	16.1
Extremely liberal	17.8
Other	20.4

Figure A.1: Politicians' perceptions of district opinion and true district opinion, 2012 Study



2012 NCS

Issue Items and Support Levels

Table A.3 gives the issue items and support levels.

Table A.3: Issue questions from the 2012 National Candidate Study, with weighted national levels of support from the CCES.

Issue Item Wording	National Mean Support	"Yes" direction	Status quo change?	Source
"Same-sex couples should be allowed to marry."	53%	Liberal	Some states	2012 CCES
"Implement a universal healthcare program to guarantee coverage to all Americans, regardless of income."*	60%	Liberal	Debatable	2008 CCES
"Abolish all federal welfare programs."	16%	Conservative	Yes	2010 CCES Module

**As described in the text, the wording of this item on the CCES was slightly different than the perception item we asked politicians, as the CCES item included the phrase "even if it means raising taxes."*

Sampling Frame

To measure elite perceptions in 2012, we conducted the 2012 National Candidate Study (NCS), a survey of candidates running for state legislature across the United States. In early August 2012 we gathered data on contact information for every candidate for state legislative office. Many legislators only had email addresses, many more had only physical street addresses, and the preponderance of candidates had both. We attempted to gather contact information for all 10,131 state legislative candidates though were unable to gather contact information for 306 (3%). This left a total of 9,825 in the sampling frame. In mid-August we (citation removed for peer review) sent

three waves of email solicitations to all 7,444 candidates for whom we had e-mail addresses. After 1,318 responses from this email solicitation, we then attempted to secure cooperation in a mail version of the survey among a randomly selected[1] 5,000 candidates who had not yet responded. These candidates were sent a postcard informing them that the survey would be arriving in the mail, followed by a paper version of the survey one week later. An additional 589 candidates returned this paper survey. In section A, we review the representativeness of these respondents.

Sample

1,907 politicians responded to the NCS in total, for a response rate of 19.5%, or about double the typical response rate for opinion surveys of the mass public.

To ensure that only candidates themselves completed the survey, the online survey contained a screener question that shut down the survey if the respondent identified himself or herself as someone other than the candidate.[2] The paper version of the survey included large type and a screener question to encourage only candidates to complete it.

A follow-up online-only survey conducted in mid-November yielded 514 responses among the 1,907 respondents to the first wave of the study.

Perception Items

Among other questions, the surveys queried politicians for their perceptions of the opinions of the constituents in the districts they were running to represent on three issues: same-sex marriage, universal health care, and welfare. Specifically, we asked legislators "What percent of your constituents" would "agree with" three "statements" that had also appeared on large national public opinion surveys: "Implement a universal healthcare program to guarantee coverage to all Americans, regardless of income," "Same-sex couples should be allowed to marry," and "Abolish

[1] We conducted blocked sampling on state and incumbency, retaining the probability that each individual candidate was selected but ensuring greater balance in the resulting sample on these variables.

[2] Fewer than 2.5% of survey takers identified themselves as non-candidates and were screened out.

all federal welfare programs."[3]

We expected the public's attitudes on same-sex marriage, universal healthcare, and welfare programs would provide reasonable cases to study broader principles of representation for several reasons. Most importantly, these issues were highly salient in both national and state mass politics in 2012, with both national and state legislators making high-stakes policy decisions on these issues that affected tens of millions of Americans.[4] Moreover, these issues tap into what many see as the two core 'dimensions' of public opinion: degree of economic redistribution and government involvement in the economy in the case of universal healthcare and welfare programs, and social conservatism and traditionalism in the case of same-sex marriage. These issues also present a wealth of available public opinion data. While the debate over same-sex marriage is only about a decade old, proposals for public healthcare programs and welfare reform have been around for much longer, suggesting that these issues might not be "hard" for both elites and the public to offer positions on.

Elsewhere in the survey, we also asked candidates whether they agreed or disagreed with eleven issue statements, including the statements about same-sex marriage and universal health care noted above.

[3]The 2014 NCS asked politicians about "residents of their districts," but the 2012 survey asked them about "constituents.' Political scientists familiar with the work of Fenno (1977) may wonder whether the word "constituent" is excessively vague – e.g., Fenno (1977) refers to legislators' "multiple constituencies." Based on pilot testing with a number of current and former legislators we found that this word was the word of choice for legislators to refer to the residents of their legal electoral districts.

[4]We expect readers are familiar with the significant policy battles being waged on each issue in 2012, but for the sake of unfamiliar readers and posterity we record the highlights here. First, the fight over universal healthcare and the generosity of the welfare state have been one of the most enduring battles in American politics over the last century, recurring at all levels of government since the early 20th century and especially in the last two decades in the form of high-profile fights during the Clinton and Obama administrations. Recently, the Affordable Care Act and the Supreme Court's decision pertaining to the Medicaid expansion associated with it have forced state governments to decide whether and how to expand their Medicaid rolls. Many of the regulations and subsidies built into the 'Obamacare' law flow through state governments, meaning that Americans' health care will be significantly impacted by the decisions made by their state legislators. Health care captures about 15% of US GDP and determine the life changes of millions of Americans every year – needless to say, we believe the issue qualifies as politically and substantively significant by any standards. In the case of same-sex marriage, the debate over government recognition of same-sex relationships has raged for more than a decade, and it has been a cross-cutting cleavage, pitting religion against partisanship in many cases (Camp 2008; Stone 2012). During the 2000s, many state legislatures voted to initiate statutory or constitutional bans on same-sex marriage (Lupia, Krupnikov, Levine, Piston and Von Hagen-Jamar 2010). Increasingly, some state legislatures have passed bills to legalize same-sex marriage. More such bills were on the agenda in 2013.

Response Rate and Representativeness

Party

The sample is slightly unbalanced on party, with more Democrats than Republicans.

	Democrats	Republicans	p-value
Response rate	20.1%	15.5%	0.00

2012 Obama Vote Share and Professionalization

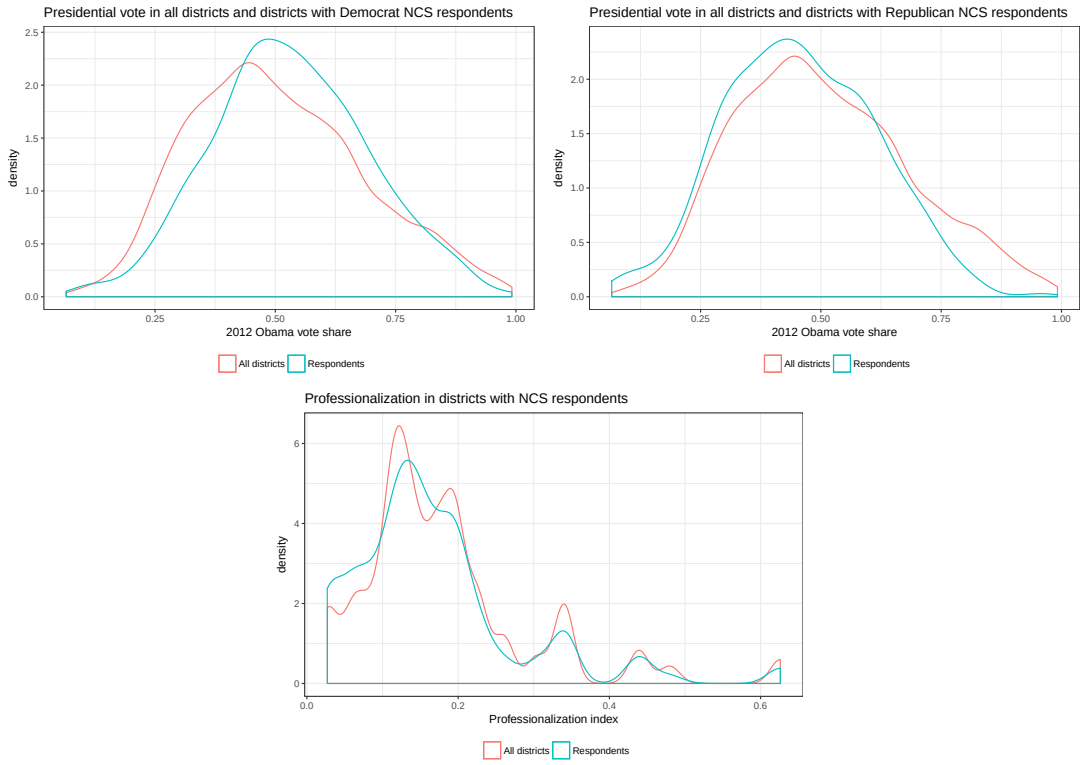
Figure A.2 plots Obama vote share in the districts with Democratic (top left) and Republican (top right) respondents against the distribution for all districts. If anything, our Democratic respondents come from more liberal districts than the population, while the districts from which we have Republican respondents are representative. The bottom panel shows that the distribution of legislative professionalization in districts where we have respondents matches the overall distribution well.

Incumbency

The sample is well-balanced on incumbency.

	Incumbents	Non-incumbents	p-value
Response rate	14.4%	14.8%	0.46

Figure A.2: Representativeness of politicians who responded to the 2012 NCS, by party, presidential vote share in the district, and state legislative professionalization.



2014 NATIONAL CANDIDATE STUDY

Response Rate and Representativeness

In the main text, we report representativeness results for the 2014 NCS broken down by district presidential vote share, state legislative professionalization, and party. In this section we review other aspects of the representativeness of our respondents.

Party

The sample is unbalanced on party, with higher response rates among Democrats.

	Democrats	Republicans	p-value
Response rate	24.6%	16.7%	0.00

Incumbency

The sample is slightly unbalanced on incumbency. 14.3% of candidates we identified as already sitting in a state legislature responded, while 21.5% of candidates we could not identify as sitting in a state legislature responded. As shown above, our results are robust to only considering incumbents.

	Incumbents	Non-incumbents	p-value
Response rate	14.3%	21.5%	0.00

Chamber type

There were not major differences in response rates between candidates running for the upper and lower houses of state legislatures.

	Lower chamber	Upper chamber	p-value
Response rate	19.4%	18.1 %	0.17

Candidate Survey Questionnaire Item Wording

This section summarizes the wording of National Candidate Study items included in the regression model of perception accuracy.

Ideology: ‘ One way that people talk about politics in the United States is in terms of left, right, and center, or liberal, conservative, and moderate. Where would you place yourself on that spectrum?’

Number of polls: ‘During the course of this campaign, how many polls will your campaign run?’

Other variables included in the OLS model were taken from Project Vote Smart’s database.

Comparison of NCS and CCES Issue Item Wordings

Table A.4: Comparison of NCS and CCES Issue Item Wordings

NCS	CCES
“Allow gays and lesbians to marry legally.”	“Do you favor or oppose **allowing gays and lesbians to marry legally?**”
“Let employers and insurers refuse to cover birth control and other health services that violate their religious beliefs.”	“Tell us whether you support or oppose the legislation in principle... **Let employers and insurers refuse to cover birth control and other health services that violate their religious beliefs.**”
“Require background checks for all gun sales, including at gun shows and over the Internet.”	“On the issue of gun regulation, are you for or against each of the following proposals?... **Background checks for all sales, including at gun shows and over the Internet.**”
“Ban assault rifles.”	“On the issue of gun regulation, are you for or against each of the following proposals?...**Ban assault rifles.**”
“Allow police to question anyone they think may be in the country illegally.”	“What do you think the U.S. government should do about immigration? Select all that apply. ... **Allow police to question anyone they think may be in the country illegally.**”
“Grant legal status to all illegal immigrants who have held jobs and paid taxes for at least 3 years, and not been convicted of any felony crimes.”	“What do you think the U.S. government should do about immigration? Select all that apply. ... **Grant legal status to all illegal immigrants who have held jobs and paid taxes for at least 3 years, and not been convicted of any felony crimes.**”
“Always allow a woman to obtain an abortion as a matter of choice.”	“Do you support or oppose each of the following proposals? ... **Always allow a woman to obtain an abortion as a matter of choice.**”

COMPARISON OF CCES ESTIMATES OF PUBLIC OPINION TO OTHER NATIONAL SURVEYS

In this section, we compare the national weighted mean support for our CCES items to contemporary surveys conducted by other firms that had similar topics and/or wording. One potential concern with the CCES surveys is that the highly engaged nature of the CCES sample could distort our measures of public opinion. There are more polls for some issues than for others. However, reassuringly, the CCES national marginals are similar to the national marginals these other surveys, suggesting no serious representativeness problems with the CCES sample that would lead us to underestimate conservatism by using the CCES data. The one exception is an item we originally asked about making abortion illegal in almost all cases, where the CCES estimate appears very far from other surveys, we believe because of a question wording issue; we describe this in further detail below. We were also unable to find any data from other polls in the November 2013 - November 2015 range on a question like the second immigration question we asked that had appeared on the CCES: “Allow police to question anyone they think may be in the country illegally.”

For each issue, below on the pages that follow we report a table of all of the surveys found in the database at pollingreport.com from November 2013 to November 2015 whose wording and subject matter is reasonably similar enough to allow for comparisons to the CCES items. In the table for each issue area, we also report the poll sources and field dates for these polls along with the question wording and the percent of the sample that reported being in favor of the policy. (In some cases, we have collapsed multiple response options into one “favor" category.) We then report the CCES marginal from the item we used in our analysis. The marginals in these other polls line up extremely closely to the CCES marginals.

Background checks for guns

Organization	Dates	Wording	Percent in favor
CBS News/New York Times	Dec. 4-8, 2013	“Do you favor or oppose a federal law requiring background checks on all potential gun buyers?"	85
Gallup	Oct. 7-11, 2015.	“Would you favor or oppose a law which would require universal background checks for all gun purchases in the U.S. using a centralized database across all 50 states?"	86
Pew	July 14-20, 2015	“Please tell me if you would favor or oppose the following proposals about gun policy. First, [see below]? ... Making private gun sales and sales at gun shows subject to background checks"	85
2014 CCES			87

Assault weapons ban

Organization	Dates	Wording	Percent in favor
Quinnipiac	Mar. 26-Apr. 1, 2013	“Do you support or oppose a nationwide ban on the sale of assault weapons?"	59
Pew	July 14-20, 2015	“Please tell me if you would favor or oppose the following proposals about gun policy. First, [see below]? ...A ban on assault-style weapons"	57
2014 CCES			61

Amnesty for undocumented immigrants

On this issue, it appears if anything that the CCES underestimates voter liberalism relative to other polls, which would bias against our findings.

Organization	Dates	Wording	Percent in favor
ABC News / Washington Post	Sept. 4-7, 2014	"Do you think undocumented immigrants currently living in the United States should or should not be given the right to live and work here legally?"	46
-	Jan. 20-23, 2014	-	49
-	Sept 4-7, 2014	-	46
-	July 16-19, 2015	-	60
Gallup	June 15-July 10, 2015	"Which comes closest to your view about what government policy should be toward illegal immigrants currently residing in the United States? Should the government deport all illegal immigrants back to their home country, allow illegal immigrants to remain in the United States in order to work, but only for a limited amount of time, or allow illegal immigrants to remain in the United States and become U.S. citizens but only if they meet certain requirements over a period of time?"	65

Public Religion Research Institute	June 10-14, 2015	“Which statement comes closest to your view about how the immigration system should deal with immigrants who are currently living in the U.S. illegally? The immigration system should allow them a way to become citizens provided they meet certain requirements, or allow them to become permanent legal residents but not citizens, or identify and deport them?" (citizens and permanent legal residents)	76
-	Feb. 4-8, 2015	-	68
-	Nov. 25-30, 2014	-	77
-	July 23-27, 2014	-	75
-	Nov. 6-10, 2013	-	77
CBS News	Jan. 9-12, 2015	“Barack Obama recently issued an executive order that would allow some illegal immigrants already in the U.S. to stay here temporarily and apply for a work permit if certain requirements are met. Do you favor or oppose this immigration policy?"	62

ABC News/Washington Post	Dec. 11-14, 2014	“Obama has taken an executive action under which as many as four million of the country’s undocumented immigrants will not face deportation over the next three years if they pass a background check and meet other requirements. Most will need to show that they have been in the United States for at least five years and have children who were born here. Do you support or oppose this immigration program?"	52
NBC News/Wall Street Journal Poll	Nov. 14-17, 2014	“Now, as you may know, there is a proposal to create a pathway to citizenship that would allow foreigners staying illegally in the United States the opportunity to eventually become legal American citizens. Do you strongly favor, somewhat favor, somewhat oppose, or strongly oppose this proposal?" (Strongly and somewhat favor)	57

-	-	“And, thinking some more about this: If a proposed pathway to citizenship allowed foreigners staying illegally in the United States the opportunity to eventually become legal American citizens if they pay a fine, any back taxes, pass a security background check, and take other required steps, would you strongly favor, somewhat favor, somewhat oppose, or strongly oppose this proposal?"	72
CNN/ORC	Jan. 31-Feb. 2, 2014	“Here are some questions about how the U.S. government should treat illegal immigrants who have been in this country for a number of years, hold a job, speak English and are willing to pay any back taxes that they owe. Would you favor or oppose a bill that allowed those immigrants to stay in this country rather than being deported and eventually allow them to apply for U.S. citizenship?"	81
2014 CCES			47

Same-sex marriage

Organization	Dates	Wording	Percent in favor
CBS News Poll	Sept. 12-15, 2014	“Do you think it should be legal or not legal for same-sex couples to marry?"	56
-	Oct. 21-25, 2015	-	56
-	June 10-14, 2015	-	57
-	Feb. 13-17, 2015	-	60
-	Sept. 12-15, 2014	-	56
-	July 29 - Aug. 4, 2014	-	53
-	Feb. 19-23, 2014	-	56
Quinnipiac University	Sept. 17-21, 2015	“Do you support or oppose allowing same-sex couples to get married?"	55
-	July 23-28, 2015	-	53
-	May 19-26, 2015	-	56
-	Apr. 16-21, 2015	-	58
NBC News	June 14-18, 2015	“The U.S. Supreme Court could decide that gays have a constitutional right to marry, which would have the effect of legalizing gay marriage throughout the country. Would you favor or oppose the Supreme Court taking this action?"	57

-	Apr. 26-30, 2015	-	58
NBC News/Wall Street Journal	March 1-5, 2015	“Do you favor or oppose allowing gay and lesbian couples to enter into same-sex marriages?" (Strongly favor and somewhat favor)	59
CNN/ORC	May 29-31, 2015	“Do you think gays and lesbians do or do not have a constitutional right to get married and have their marriage recognized by law as valid?"	63
-	Feb. 12-15, 2015	-	63
ABC News/Washington Post	4/16-20/15	“Overall, do you support or oppose allowing gays and lesbians to marry legally?"	56
-	Feb. 27-Mar. 2, 2014	-	59
-	May 29-June 1, 2014	-	56
-	July 16-19, 2015	“Do you support or oppose the U.S. Supreme Court ruling legalizing gay marriage?"	52

-	Oct. 9-12, 2014	“Do you support or oppose the Supreme Court action this week that allows gay marriages to go forward in several more states?"	56
McClatchy-Marist Poll	Aug. 4-7, 2014.	“Do you strongly favor, favor, oppose, or strongly oppose allowing gays and lesbians to marry legally?" (Strongly favor and favor)	54
Bloomberg	March 7-10, 2014	“Do you support or oppose allowing same-sex couples to get married?"	55
Public Religion Research Institute	Nov. 12-Dec. 18, 2013	“All in all, do you strongly favor, favor, oppose, or strongly oppose allowing gay and lesbian couples to marry legally?” (Strongly favor and favor)	53
Suffolk University/USA Today	April 8-13, 2015	“Do you strongly favor, favor, oppose, or strongly oppose allowing gays and lesbians to marry legally?"	51
2014 CCES			56

Religious exemptions for birth control mandate

Organization	Dates	Wording	Percent in favor
CBS	March 20-23, 2014	"What about companies and non-religious organizations? Do you think these employers should have to cover the cost of prescription birth control for their female employees as part of their health insurance plans, or should these employers be able to opt out of covering that, based on religious objections?"	51
2014 CCES			43

Abortion Legal

Although abortion is a relatively commonly polled issue, we were only able to find one poll that closely mirrored the CCES wording. That poll, from Pew, matched the CCES marginal very closely.

Organization	Dates	Wording	Percent in favor
Pew	Sept 2-9, 2014	"Do you think abortion should be... legal in all cases, legal in most cases, illegal in most cases, or illegal in all cases?"	55
2014 CCES			57

Abortion Illegal Except In Special Cases

The CCES appears to produce very misleading results for one item we originally included in the perceptions battery on the NCS: "Permit abortion only in case of rape, incest or when the

woman's life is in danger." Fully 50% of respondents to the CCES agreed with this statement. We suspect this represents a significant overestimate of the share of respondents who think abortion should *only* be legal in these circumstances. Of the 50% of respondents who agreed with this item, 37% agreed that abortion should always be legal as a matter of personal choice, consistent with pro-choice respondents missing the word 'only' in the item wording. In addition, in the ANES when respondents are given several mutually exclusive statements about abortion, only 28% indicate that this statement best describes their view, about half the share as in the CCES.[5] Because of these problems with this survey item, we have excluded it from our analysis.

[5] http://www.electionstudies.org/nesguide/toptable/tab4c_2b.htm.

DETAILS OF MRP ESTIMATION PROCEDURE

Estimation of an MRP model proceeds in two stages. First, a hierarchical logistic choice model is estimated for the opinion item being studied. Our models include predictors at three different levels. At the individual level, we include random effects for the respondent's education, gender, and race/ethnicity. At the state-house and -senate district level, we include individual district random effects, fixed effects for the districts' median household income, Obama's share of the 2012 Presidential vote in the district,and, for the same-sex marriage, religious exemptions, and abortion models, percentage Mormon or evangelical (see Lax and Phillips (2009*a*, 2013)). State random effects, centered around regional random effects, complete the individual model.[6]

The general form of the model is a varying intercept, varying slope model:

$$\theta_j = logit^{-1}(X_j\beta + \sum_s \alpha^S_{S(j)}) \tag{A.1}$$

where j indexes cells, each of which is identified by the unique combination of race, gender, education, and district, and S represents subsets of the grouping variables. β represents the fixed effects and is modeled with a uniform prior distribution. α^S are random effects, modeled with hierarchical Gaussian priors.

The response model is specified as:

$$Pr(y=1) = logit^{-1}(\beta_0 + \alpha^{gender}_{j[c]} + \alpha^{race}_{k[c]} + \alpha^{edu}_{l[c]} + \alpha^{gender\times race}_{m[c]} + \alpha^{district}_{d[c]} + \alpha^{state}_{s[c]} + \alpha^{region}_{r[c]}) \tag{A.2}$$

The individual-level random effects are modeled as:

$$\alpha^{gender}_j \sim N(0, \sigma^2_{gender}) \text{ for } j = 1, 2 \tag{A.3}$$

$$\alpha^{race}_k \sim N(0, \sigma^2_{race}) \text{ for } k = 1, 2, 3 \tag{A.4}$$

[6]The models are estimated using the `glmer()` function in `R`.

$$\alpha_l^{age} \sim N(0, \sigma_{age}^2) \text{ for } l = 1...4 \tag{A.5}$$

$$\alpha_m^{edu} \sim N(0, \sigma_{edu}^2) \text{ for } m = 1...4 \tag{A.6}$$

The district, state and region effects are modeled:

$$\alpha_d^{district} \sim N(\alpha_{s[c]}^{state} + \beta presvote + \beta income, \sigma_{district}^2) \text{ for } d = 1...4335 \tag{A.7}$$

$$\alpha_s^{state} \sim N(\alpha_{[r]}^{region}, \sigma_{state}^2) \text{ for } s = 1...50 \tag{A.8}$$

$$\alpha_r^{region} \sim N(0, \sigma_{region}^2) \text{ for } r = 1...4 \tag{A.9}$$

This model yields predictions for the share of individuals in any given state legislative district who support same-sex marriage or universal health care in all possible combinations of race, gender, and education.

Poststratification

The final step in constructing district-level estimates is poststratification. We first use data from the US Census American Community Survey 2014 5-Year file to calculate the share of individuals in each state legislative district that fall into each 'cell': for example, of all the individuals living in California's 17th State Assembly district, what share of them are white college-educated white women? These official US Census estimates are exceptionally accurate.

We then merge these cell-level district proportion estimates from the Census with our cell-level opinion estimates from the multilevel regression model to construct the district-level opinion estimates. This poststratification process is a straightforward aggregation process by which

estimates for each cell θ_j in each district are summed in proportion to the share of the district that they represent. Note that the cells in each district are exhaustive and mutually exclusive.

$$\theta_{district} = \frac{\sum_{j \in J_{district}} N_j \theta_j}{\sum_{j \in J_{district}} N_j} \tag{A.10}$$

The result of this poststratification process are estimates of district support for each issue for each of the nation's state legislative districts.

Allocation of Survey Respondents to Districts and MRP Weights

In fitting the multilevel choice models, respondents were matched to 2014 state legislative districts using ZIP codes. Because some ZIP codes straddle state legislative boundaries, we estimated the likelihood that each respondent had been assigned to the correct upper and lower house district by taking the percentage of the zip code contained in that district. The vast majority of respondents can be assigned to districts deterministically, but some might have been in multiple districts. For these respondents, we calculated the probability that they were in each district given their race, using data from the US Census on the racial composition of each state legislative districts. We then weighted responses by these values, such that every response in the original data represented one or more rows in the estimation data with weights that summed to one. The multilevel regression takes these weights into account. The same procedure is used in the county-level analysis to match respondents to counties.

Uncertainty in MRP Estimates

To characterize the uncertainty in our MRP estimates of district opinion, we simulate predicted cell probabilities from our multilevel models and use those simulated cell probabilities.

We follow Kastellec et al. (2015) by using `arm::sim` to simulate cell probabilities, then we re-poststratify many times to simulate district-level probabilities. The simulated predictions are developed from drawing from simulations of the random and fixed effects drawn from a posterior under a flat prior and conditioned on the estimated variance-covariance of the random effects.

From the simulated cell proportions, we estimate 1,000 sets of MRP estimates for each district for each issue. Then, we use these estimates to simulate two test statistics: candidates' mean absolute error and candidates' mean conservative error. We take the 95% empirical interval of these simulations as our measure of the credible interval for the test statistics.

Table A.5 shows 95% intervals for the candidates' mean overestimates of conservative policy support using the simulated MRP estimates.

Table A.5: 95% simulation intervals for conservative overestimation by party

Issue	All Politicians	Democrats Only	Republicans Only
Same-sex Marriage	[8.06, 10.27]	[2.64, 4.86]	[16.08, 18.38]
Religious Exemptions	[5.56, 7.44]	[-0.87, 1.05]	[15.12, 17]
Ban assault weapons	[21.49, 24.18]	[16.17, 18.97]	[29.39, 32.15]
Background check	[35.22, 37.2]	[31.01, 32.94]	[41.39, 43.41]
Abortion always legal	[10.25, 13.09]	[6.02, 8.88]	[16.39, 19.28]
Amnesty for undoc. immigrants	[7.38, 9.27]	[4.09, 5.99]	[12.17, 14.07]
Police question immigrants	[12.27, 14.33]	[9.1, 11.21]	[16.97, 19.07]

Table A.6 shows 95% intervals for the candidates' mean absolute errors computed using the simulated MRP estimates.

Table A.6: 95% simulation intervals for absolute error by party

Issue	All Politicians	Democrats Only	Republicans Only
Same-sex marriage	[16.14, 16.99]	[13.49, 14.06]	[19.91, 21.54]
Religious exemptions	[16.8, 17.32]	[14.08, 14.39]	[20.66, 21.88]
Guns: ban assault weapons	[25.28, 27.19]	[21.6, 23.21]	[30.68, 33.14]
Guns: background check	[35.77, 37.62]	[31.68, 33.45]	[41.75, 43.7]
Abortion legal	[16.86, 18.29]	[14.82, 15.92]	[19.64, 21.82]
Immigration: amnesty	[15.99, 16.77]	[13.77, 14.42]	[19.19, 20.26]
Immigration: Police question	[19.12, 20.21]	[17.23, 18.23]	[21.89, 23.27]

Robustness to Alternate Specifications of MRP Models

To test the robustness of our MRP estimates to alternative specifications of the multilevel model, we re-estimate the models using only one district-level predictor, as is recommended (at least with respect to a state-level MRP, using one state-level predictor) by Lax and Phillips (2013). We

re-estimate the MRP models using the same procedure as above, except one set of predictions uses district-level presidential vote as the only fixed effect, excluding district median household income, and the other using only household income, but excluding presidential vote. We then simulate from these fitted models as we did in Section A, generating two new sets of predictions and confidence intervals.

Below we repeat Tables A.5 and A.6 using each of the two additional sets of simulated MRP estimates. Tables A.7 and A.9 show versions of Table A.6 estimated without the use of household income and without the use of Presidential vote, respectively. Tables A.8 and A.10 show versions of Table A.5 estimated without the use of household income and without the use of Presidential vote, respectively. The results are quite similar, suggesting that our MRP estimates are not sensitive to the inclusion or exclusion of particular district-level predictors or the use of only one predictor.

Table A.7: 95% simulation intervals for absolute error by party, using MRP estimates from a model using only 2012 presidential vote as a district-level predictor.

Issue	All Politicians	Democrats Only	Republicans Only
Same-sex marriage	[16.01, 17.06]	[13.49, 14.22]	[19.56, 21.61]
Religious exemptions	[16.82, 17.35]	[14.12, 14.43]	[20.69, 21.91]
Guns: Ban assault weapons	[25.13, 27.03]	[21.45, 23.15]	[30.44, 32.98]
Guns: Background check	[35.39, 37.35]	[31.26, 33.19]	[41.4, 43.47]
Abortion legal	[16.66, 18.33]	[14.8, 16.08]	[19.19, 21.7]
Immigration: amnesty	[15.95, 16.66]	[13.73, 14.34]	[19.12, 20.14]
Immigration: police question	[19.11, 20.17]	[17.24, 18.19]	[21.94, 23.24]

Table A.8: 95% simulation intervals for conservative overestimation by party, using MRP estimates from a model using only 2012 presidential vote as a district-level predictor.

Issue	All Politicians	Democrats Only	Republicans Only
Same-sex marriage	[7.22, 10.15]	[1.78, 4.74]	[15.34, 18.3]
Religious exemptions	[5.36, 7.24]	[-1.03, 0.87]	[14.93, 16.82]
Guns: Ban assault weapons	[21.12, 23.8]	[15.85, 18.56]	[29, 31.81]
Guns: Background check	[34.81, 36.91]	[30.52, 32.64]	[41.02, 43.2]
Abortion legal	[9.52, 12.77]	[5.29, 8.63]	[15.59, 18.96]
Immigration: amnesty	[7.44, 9.23]	[4.11, 5.92]	[12.19, 14.03]
Immigration: police question	[12.25, 14.19]	[9.07, 11.07]	[16.98, 18.93]

Table A.9: 95% simulation intervals for absolute error by party, using MRP estimates from a model using only median district household income as a district-level predictor.

Issue	All Politicians	Democrats Only	Republicans Only
Same-sex marriage	[17.28, 18.58]	[14.74, 15.84]	[20.6, 23.11]
Religious exemptions	[17.84, 18.7]	[15.25, 15.9]	[21.27, 23.24]
Guns: Ban assault weapons	[25.32, 27.79]	[21.69, 23.84]	[30.5, 34.14]
Guns: Background check	[35.45, 37.73]	[31.12, 33.43]	[41.74, 44.09]
Abortion legal	[17.84, 19.99]	[16.09, 17.72]	[20.09, 23.47]
Immigration: amnesty	[16.85, 17.84]	[14.63, 15.52]	[19.85, 21.41]
Immigration: police question	[19.87, 21.17]	[17.89, 19.14]	[22.79, 24.41]

Table A.10: 95% simulation intervals for conservative overestimation by party, using MRP estimates from a model using only median district household income as a district-level predictor.

Issue	All Politicians	Democrats Only	Republicans Only
Same-sex marriage	[7.02, 10.87]	[1.16, 5.05]	[15.72, 19.61]
Religious exemptions	[4.93, 7.98]	[-1.88, 1.19]	[15.06, 18.19]
Guns: Ban assault weapons	[20.19, 24.03]	[14.35, 18.38]	[28.6, 32.72]
Guns: Background check	[34.7, 37.23]	[30.17, 32.8]	[41.29, 43.8]
Abortion legal	[9.26, 13.75]	[4.35, 8.92]	[16.23, 20.6]
Immigration: amnesty	[7.66, 10.04]	[3.83, 6.27]	[13.15, 15.55]
Immigration: police question	[12.16, 14.75]	[8.77, 11.42]	[17.17, 19.83]

REGRESSION DISCONTINUITY ANALYSIS OF PARTISAN DIFFERENCES IN CONTACTING POLITICIANS

The main text claims that Republican politicians are especially likely to hear from Republican constituents relative to how often Democratic politicians are to hear from Democratic constituents. This descriptive claim is demonstrated to hold in the 2008 CCES in Table 3.7 in the main text. Our claims in the main text about who Democratic and Republican politicians tend to hear from do not depend on any causal interpretation of these differences. For example, it may be the case that Republican citizens in districts that elect Republicans tend to be more active for some other reason. However, here we show that it appears this descriptive claim *may* indeed be driven, at least in part, by an underlying causal behavioral process among Republican citizens. In particular, in Table A.11, we formally analyze a regression discontinuity to see whether the descriptive finding presented in the 'Partisan Asymmetries in Contact and Activism' section of the main paper has a causal underpinning such that having a Repubican MC causes Republicans to be more likely to reach out to their MC. We specify the regression discontinuities at the district level using Republican winning percentage as the running variable. We use the Calonico, Cattaneo and Titiunik (2014*a*) method for robust inference, as implemented in the `rdrobust` package for `R` (Calonico, Cattaneo and Titiunik 2014*b*). We test four outcome variables at the discontinuity, using local linear fits in the optimally selected bandwidth:[7] the percent of contacts coming from Democrats and Republicans in each district, and the percent of Democrats and of Republicans in each district who report contacting. These results suggest that the main driver of the asymmetry in contacting is that Republican citizens are especially likely to contact Republican legislators.

Figure A.3 shows the apparent effect of electing a Republican on Republicans' and Democrats' contacting behavior visually. Figure A.4 shows the implications for politicians' perspective.

One important caveat to this analysis is that regression discontinuity designs estimate causal effects that are local to the kinds of areas that are at the cutpoint—in this case, highly competitive

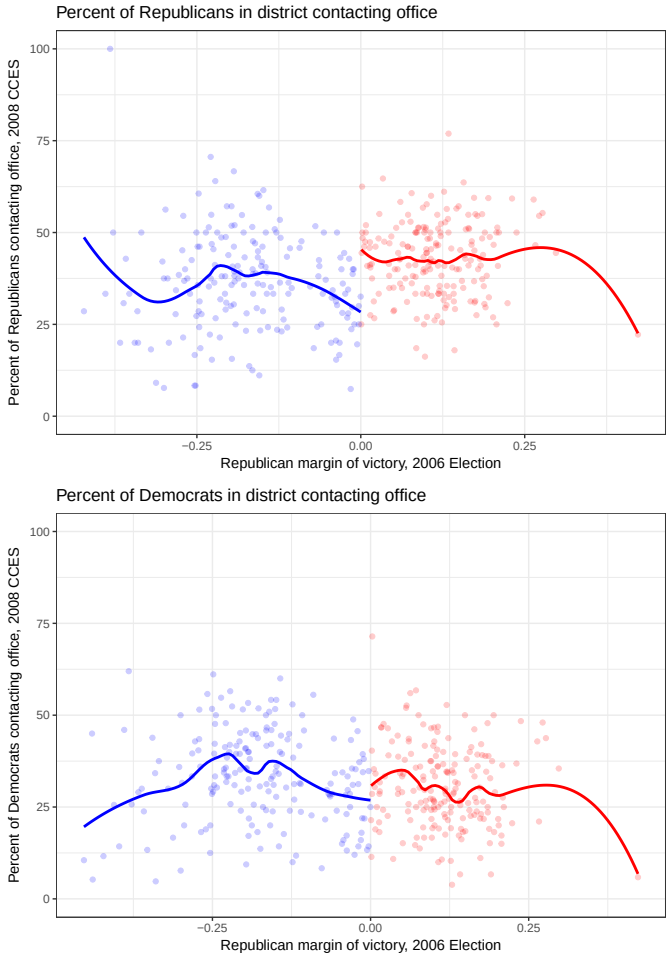
[7] See Calonico, Cattaneo and Titiunik (2014*a*) for more information on the optimal bandwidth selection procedure we implement.

Table A.11: Regression discontinuity results: Effects of 2006 US House election results on 2008 CCES self-reported contacting of US House Members

Outcome	Estimate: Effect of Republican Victory	Robust 95% CI	Robust p-value
Percent of Dems contacting	5.25	[-6.03, 14.87]	0.41
Percent of Reps contacting	15.30	[8.00, 23.51]	0.00
Percent of contacts from Dems	-7.71	[-19.02, 1.33]	0.09
Percent of contacts from Reps	5.97	[-2.62, 16.11]	0.16

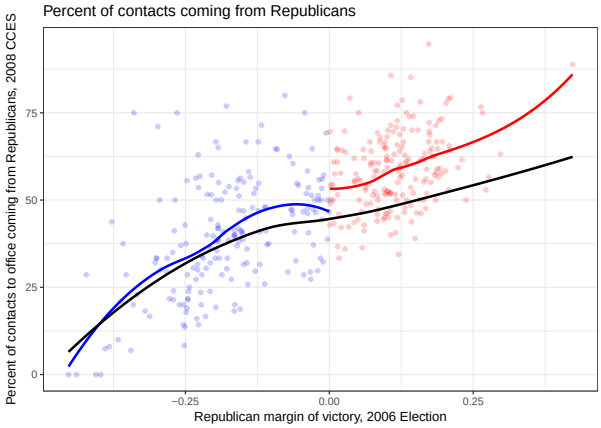
districts. As a result, please note that the results in Table A.11 test the causal effect of a Republican just winning in marginal districts whereas the key claim our broader analysis relies on is different, the simple descriptive difference shown in Table 3.7 between all Democratic and Republican districts.

Figure A.3: Republican citizens contact Republican politicians especially often



Notes: The top panel plots the percent of Republicans in each district who reported contacting their US House Member's office in the 2008 CCES. The x-axis records the Republican margin of victory in the 2006 elections, such that the right half of the figure describes contacting behavior from 2007-2008 in districts where Republican candidates served during that period because they won a 2006 House election. The bottom panel shows the same for Democrats, who do not show the same dramatic increase. The Figure shows that Republican citizens contact Republican representatives especially often.

Figure A.4: Republican politicians hear from Republican citizens especially disproportionately



Notes: This Figure plots the proportion of total contacts to the office that come from Republicans. The black line represents a "null" under which all citizens contact equally. Democratic politicians hear from Republicans disproportionately; Republican politicians hear from Republican constituents especially disproportionately.

HOW MISPERCEPTIONS VARY WITH THE PARTISAN IMBALANCE IN CONSTITUENCY CONTACT

In the main text, we speculate that the general pattern that politicians in 2012 and 2014 overestimate conservatism and that Republicans do so especially may result from biases in who participates in the public spheres they inhabit, which we proxy with data on constituent contact. One implication of this hypothesis is that there should be variation in the strength of conservative misperceptions politicians hold within party that corresponds with variation in the strength of the Republican-leaning imbalance in constituent contact in their districts.

To test this implication, we undertake an additional analysis of the contacting data to extend the results more fully to state legislative districts. This analysis should be regarded as exploratory, as it has at least three important limitations. First, the data on contacting behavior are from 2008, the most recent year in which the CCES asked this question, but our data on politicians' perceptions and public opinion are from 2012 and 2014. (Using the 2012 ANES data is not feasible because the sample size is far, far too small, and the ANES data does not have the necessary geographic identifiers available.) Second, the CCES data asks about contacting Congress, while our focus is on state legislative politicians. Finally, sample sizes are extremely small, so these estimates are very noisy. Measurement error in dependent variables biases estimates toward zero (Achen 1982), and the measurement error in the dependent variable of contacting is very large. In some districts, we are even missing data altogether, and these districts are dropped from the analysis.

For our analysis, we first estimate contacting rates for Democrats and Republicans in each district. We then calculate a dependent variable called "Republican Contact Advantage" which is the share of individuals who said they contacted their legislator who are Republicans minus the share that are Democrats. Higher values of this variable correspond to districts where politicians should hear from Republicans more overwhelmingly. For our independent variable we overestimation of conservatism, calculated as the mean difference between the MRP estimates and the politicians' perceptions of public opinion across the issues the politician was asked about.

Again emphasizing the previous caveats, we do find some evidence of an association between higher rates of contacting by Republican constituents and increased conservative misperceptions among politicians. The first column of Table A.12 shows that the larger the Republican contact advantage in a district, the more a politician in that district overestimates conservatism. This regression also includes dummies for whether a politician is a Republican and for which issue questions they were shown (as we rotated which perceptions questions we asked and there are different mean levels of conservatism overestimation on different questions).

With this said, a simple alternative explanation for this finding that we cannot rule out is that the presence of more active conservatives, not their higher levels of contacting and other public sphere behavior, are what drives this result. To try to deal with this alternative explanation, we include a control for district-level McCain vote share in 2008, as this is the year the CCES contacting question was asked. In the presence of this control, the coefficient is still positive and substantively significant but is statistically insignificant. Unfortunately, it is not necessarily straightforward how to parse this result. As Achen (1982) shows, when two correlated dependent variables are entered into a regression, regression favors the variable that is more precisely measured, and true McCain vote share in each district is much more precisely measured than is the contacting behavior we estimated from the CCES sample survey, which contains a great deal of measurement error.

To try to reduce the measurement error in our dependent variable, we also analyzed the data at a higher level of analysis, the state level, in Table A.13. There we test the hypothesis that politicians misperceive public opinion more in states where Republicans are especially active relative to Democrats. We find a similar pattern of findings in that analysis, with a coefficient twice the size as the coefficient on the district-level analysis. However, again, this coefficient reduces in size and its standard error increases when we include the colinear predictor of McCain vote share—but, the coefficient remains positive and substantively large in magnitude. In both cases, we cannot be sure to what extent the facts of measurement error in multivariate regression or simple omitted variable bias is responsible.

In summary, although we urge caution in interpreting these results, they do seem to be

consistent with our interpretation that asymmetric rates of contact from conservative citizens could be a potential mechanism for state legislative politicians' misperceptions of public opinion in their districts.

Table A.12: Politicians who hear from Republicans especially often overestimate constituency conservatism especially: district-level results.

	DV = Mean Overestimation of Conservatism	
Republican Contact Advantage	3.89*	0.91
in District	(0.80)	(0.87)
McCain 2008 Vote Share		0.15*
		(0.02)
Republican Politician	12.02*	11.88*
	(0.75)	(0.76)
Dummies for Questions Answered	Yes	Yes
Constant	15.22 *	14.18 *
	(5.12)	(5.18)
N	1117	1026
R^2	0.23	0.26

Standard errors in parentheses.
$*$ indicates significance at $p < 0.05$

Table A.13: Politicians who hear from Republicans especially often overestimate constituency conservatism especially: state-level results.

	DV = Mean Overestimation of Conservatism	
Republican Contact Advantage	6.96*	2.80
in State	(2.98)	(4.13)
McCain 2008 Vote Share		0.10
		(0.07)
Republican Politician	11.99*	11.96*
	(0.79)	(0.77)
Dummies for Questions Answered	Yes	Yes
Constant	18.67**	14.50
	(7.83)	(8.95)
N	1,543	1,543
R^2	0.21	0.21

Robust standard errors in parentheses, clustered by state.
$*$ indicates significance at $p < 0.05$

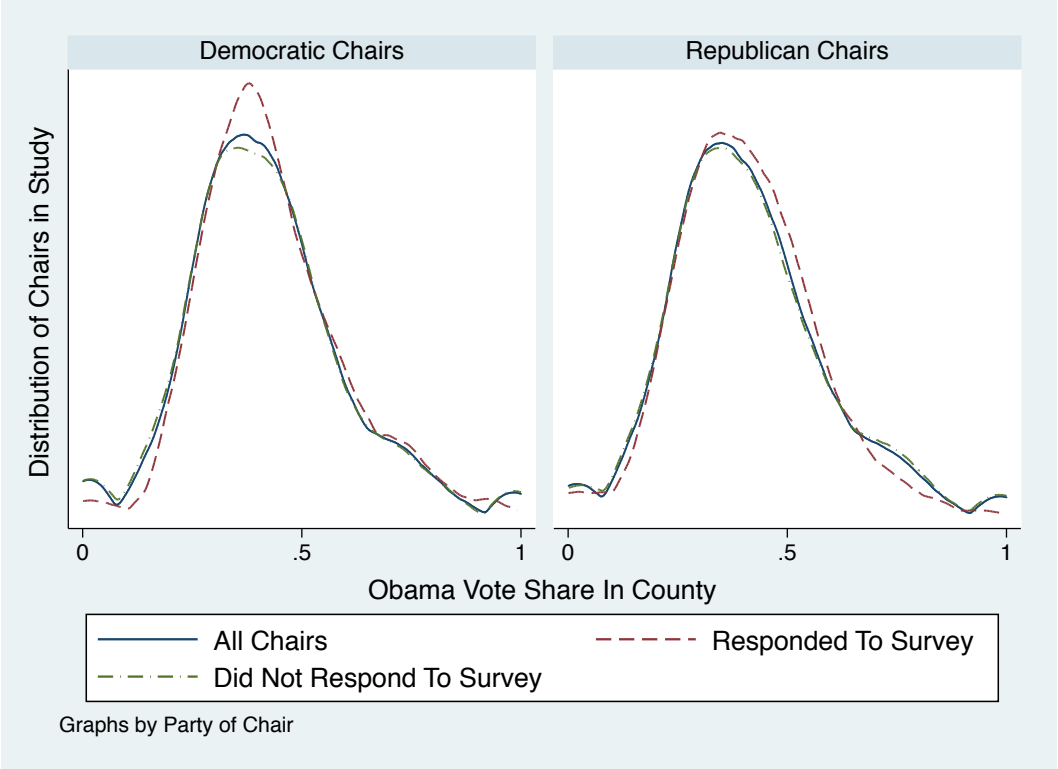
Appendix B

Appendix to Chapter 5, Coauthored with David E. Broockman, Nicholas Carnes and Melody Crowder-Meyer

REPRESENTATIVENESS

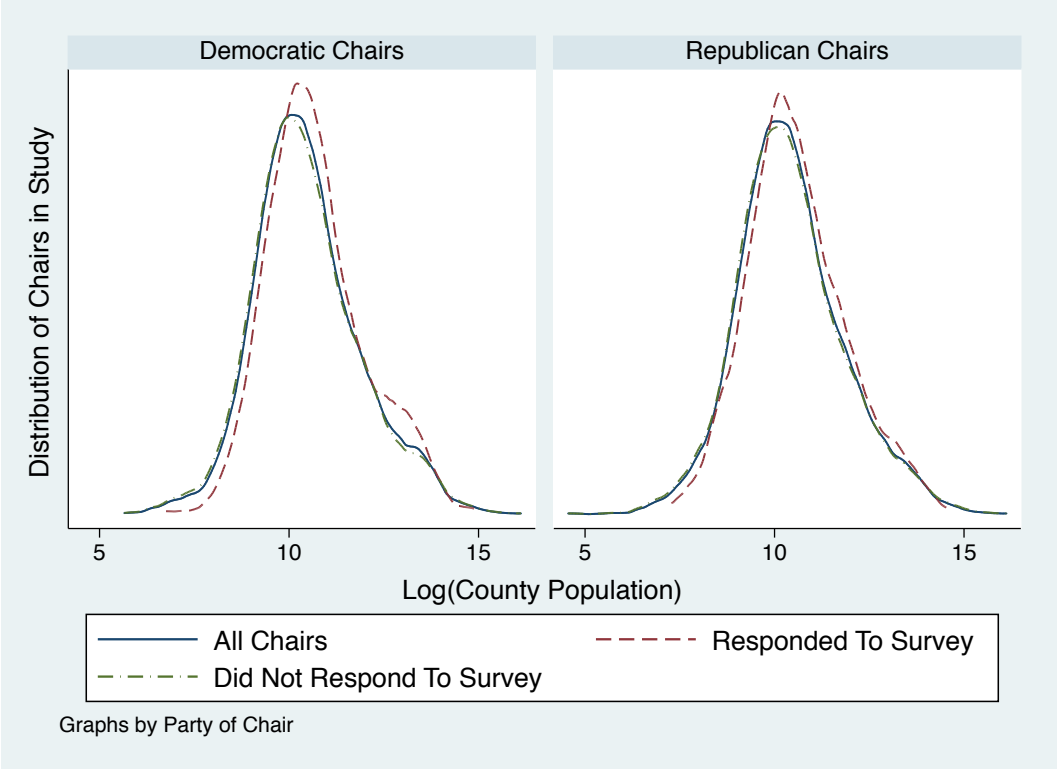
The respondents were broadly representative of the sampling frame. Response rates were nearly identical by region; for Republican (18.0%) and Democratic party chairs (17.9%); and for party leaders previously identified as men (18.2%) and women (18.5%). One potential concern with the data is that only party chairs in uncompetitive areas would respond. However, Figure B.1 indicates that the underlying partisan composition of the areas where our respondents are from is fairly representative.

Figure B.1: Obama 2012 County Vote Share Among Survey Respondents and Non-Respondents



Another possibility is that only county party chairs from very small counties would be willing to respond to our survey, undermining the external validity of our inferences. Figure B.2 shows that, if anything, the opposite is the case: we received a similar response rate in counties of all sizes, and very slightly more responses from larger counties.

Figure B.2: County Population Among Respondents and Non-Respondents



CONJOINT EXPERIMENT

Table B.2 lists the attributes that the hypothetical candidates could have. Attributes were fully randomized, with the exception of age, which was constant, with the first profile always being 43 years old and the second profile always being 47 years old. Two different sents of first names were used for the two profiles in order to ensure that no pair of candidates had the same name. Figure B.3 shows how a respondent on the online survey would have seen the experiment.

DETAILS OF MRP ESTIMATION PROCEDURE

Estimation of an MRP model proceeds in two stages. First, a hierarchical logistic choice model is estimated for the opinion item being studied. Our models include predictors at two different levels. At the individual level, we include random effects for the respondent's education, gender,

Table B.1: Predictors of Survey Response

VARIABLES	(1) Responded To Survey	(2) Responded To Open Ended Question
Chair Is Republican	0.062	0.016
	(0.082)	(0.040)
Obama Two-Party Vote Share In County	0.003	-0.040*
	(0.044)	(0.021)
Obama Two-Party Vote Share In County X Chair Is Republican	-0.072	0.007
	(0.061)	(0.030)
Log(County Population)	0.020***	-0.000
	(0.006)	(0.003)
Log(County Population) X Republican	-0.002	-0.001
	(0.008)	(0.004)
Constant	-0.033	0.050*
	(0.059)	(0.028)
Observations	4,933	4,933
R-squared	0.005	0.002

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

and race/ethnicity. At the state level, we include individual state random effects and fixed effects for Obama's share of the 2012 Presidential vote in the state (see Lax and Phillips (2009*a*)). State random effects are centered around regional random effects.[1]

Hierarchical Model

The general form of the model is a varying intercept, varying slope model:

$$\theta_j = logit^{-1}(X_j\beta + \sum_s \alpha^S_{S(j)}) \tag{B.1}$$

where j indexes cells, each of which is identified by the unique combination of race, gender, education, and state, and S represents subsets of the grouping variables. β represents the fixed effects and is modeled with a uniform prior distribution. α^S are random effects, modeled with hierarchical Gaussian priors.

[1]The models are estimated using the `bglmer()` function in `R`.

Figure B.3: Survey Instrument Example

Suppose there is a primary for an open county board seat in your local party area and the two individuals below are considering running for the seat. We'd like you to consider the following two potential candidates for this office.

	Potential Candidate A	Potential Candidate B
Name	Lauren	Alexander
Age	47	43
Occupation	Small business owner	Factory worker
Experience in party	None	None
Life circumstances	Is independently wealthy	Military veteran
Talents	Well known in community	Physically attractive
Positions and ideology	Somewhat more liberal than the typical voter from your party in your county	Somewhat more conservative than the typical voter from your party in your county

Which one of the above candidates would you be more likely to encourage to run for office?

- ○ Candidate A
- ○ Candidate B

The response model is specified as:[2]

$$Pr(y = 1) = logit^{-1}(\beta_0 + \alpha^{gender}_{j[c]} + \alpha^{race}_{k[c]} + \alpha^{edu}_{l[c]} + \alpha^{gender \times race}_{m[c]} + \alpha^{state}_{s[c]} + \alpha^{region}_{r[c]}) \qquad \text{(B.2)}$$

The individual-level random effects are modeled as:

[2]The model for the other issues is the same except that it does not use the fixed effects for state percent Mormon and evangelical.

Table B.2: Treatments in Conjoint Experiment

Attribute	Values
Name (gender)	Male names: Donald, Laurence, Nathan, Nicholas, Samuel, Alexander, Andrew, Christopher, Charles, Daniel. Female names: Donna, Lauren, Natalie, Nicole, Samantha, Alexandra, Andrea, Charlotte, Christina, Danielle. (No pair of candidates had the same name.)
Age	43, 47
Occupation	Attorney, business executive, investor, lawyer, nurse, small business owner, social worker, teacher, receptionist, restaurant server, factory worker
Experience in party	Active and well known in county party organization, active and well known in group important to the party, frequent campaign volunteer for the last four election cycles, frequent campaign volunteer in last election cycle, none
Life circumstances	Has a great deal of free time, has two young children, has flexible work hours, is independently wealthy, military veteran
Talents	Assertive, experienced fundraiser for local charities, hard worker, physically attractive, talented public speaker, well known in community
Positions and ideology	Much more conservative than the typical voter from your party in your county, somewhat more conservative than the typical voter from your party in your county, similar views to the typical voter from your party in your county, somewhat more liberal than the typical voter from your party in your county, much more liberal than the typical voter than the typical voter from your party in your county

$$\alpha_j^{gender} \sim N(0, \sigma^2_{gender}) \text{ for } j = 1, 2 \tag{B.3}$$

$$\alpha_k^{race} \sim N(0, \sigma^2_{race}) \text{ for } k = 1, 2, 3 \tag{B.4}$$

$$\alpha_l^{age} \sim N(0, \sigma^2_{age}) \text{ for } l = 1...4 \tag{B.5}$$

$$\alpha_m^{edu} \sim N(0, \sigma_{edu}^2) \text{ for } m = 1...4 \tag{B.6}$$

The state and region effects are modeled:

$$\alpha_s^{state} \sim N(\alpha_{[r]}^{region} + \beta presvote, \sigma_{state}^2) \text{ for } s = 1...50 \tag{B.7}$$

$$\alpha_r^{region} \sim N(0, \sigma_{region}^2) \text{ for } r = 1...4 \tag{B.8}$$

This model yields predictions for the share of individuals in any given state who support same-sex marriage or universal health care in all possible combinations of race, gender, and education. Because of the CCES' large sample size, the state-level random effects dominate the estimation, meaning MRP makes only slight adjustments to the disaggregated data from the CCES.

Poststratification

The final step in constructing state-level estimates is poststratification. We first use data from the US Census American Community Survey 2013 5-Year file to calculate the share of individuals in each state that fall into each 'cell': for example, of all the individuals living in California, what share of them are college-educated white women? These official US Census estimates are exceptionally accurate.

We then merge these cell-level state proportion estimates from the Census with our cell-level opinion estimates from the multilevel regression model to construct the state-level opinion estimates. This poststratification process is a straightforward aggregation process by which estimates for each cell θ_j in each state are summed in proportion to the share of the state that they represent. Note that the cells in each state are exhaustive and mutually exclusive.

$$\theta_{state} = \frac{\sum_{j \in J_{state}} N_j \theta_j}{\sum_{j \in J_{state}} N_j} \tag{B.9}$$

The result of this poststratification process are estimates of state support for each issue for each of the nation's states.

Appendix C

Appendix to Chapter 6

Details of MRP Estimation Procedure

Estimation of an MRP model proceeds in two stages. First, a hierarchical logistic choice model is estimated for the opinion item being studied. At the individual level, we include random effects for the respondent's education, gender, and race/ethnicity. At the state level, state random effects, centered around regional random effects, complete the individual model.[1]

The general form of the model is a varying intercept, varying slope model:

$$\theta_j = logit^{-1}(X_j\beta + \sum_s \alpha^S_{S(j)}) \tag{C.1}$$

where j indexes cells, each of which is identified by the unique combination of race, gender, education, and state, and S represents subsets of the grouping variables. β represents the fixed effects and is modeled with a uniform prior distribution. α^S are random effects, modeled with hierarchical Gaussian priors.

The response model for is specified as:

$$Pr(y=1) = logit^{-1}(\beta_0 + \alpha^{gender}_{j[c]} + \alpha^{race}_{k[c]} + \alpha^{edu}_{l[c]} + \alpha^{gender\times race}_{m[c]} + +\alpha^{state}_{s[c]} + \alpha^{region}_{r[c]}) \tag{C.2}$$

[1]The models are estimated using the `bglmer()` function in `R`.

The individual-level random effects are modeled as:

$$\alpha_j^{gender} \sim N(0, \sigma^2_{gender}) \text{ for } j = 1, 2 \tag{C.3}$$

$$\alpha_k^{race} \sim N(0, \sigma^2_{race}) \text{ for } k = 1, 2, 3 \tag{C.4}$$

$$\alpha_l^{age} \sim N(0, \sigma^2_{age}) \text{ for } l = 1...4 \tag{C.5}$$

$$\alpha_m^{edu} \sim N(0, \sigma^2_{edu}) \text{ for } m = 1...4 \tag{C.6}$$

The state and region effects are modeled:

$$\alpha_s^{state} \sim N(\alpha_{[r]}^{region} + \beta DPSP, \sigma^2_{state}) \text{ for } s = 1...50 \tag{C.7}$$

$$\alpha_r^{region} \sim N(0, \sigma^2_{region}) \text{ for } r = 1...4 \tag{C.8}$$

This model yields predictions for the share of individuals in any given state who support each issue in all possible combinations of race, gender, and education.

Poststratification

The final step in constructing state-level estimates is poststratification. I first use data from the US Census American Community Survey 2013 5-Year file to calculate the share of individuals in each state that fall into each 'cell': for example, of all the individuals living in California', what share of them are white college-educated white women?

I then merge these cell-level state proportion estimates from the Census with the cell-level opinion estimates from the multilevel regression model to construct the district-level opinion estimates. This poststratification process is a straightforward aggregation process by which

estimates for each cell θ_j in each state are summed in proportion to the share of the state that they represent. Note that the cells in each state are exhaustive and mutually exclusive.

$$\theta_{district} = \frac{\sum_{j \in J_{district}} N_j \theta_j}{\sum_{j \in J_{district}} N_j} \tag{C.9}$$

The result of this poststratification process are estimates of state support for each of the issues.

Questions used for ideology estimation

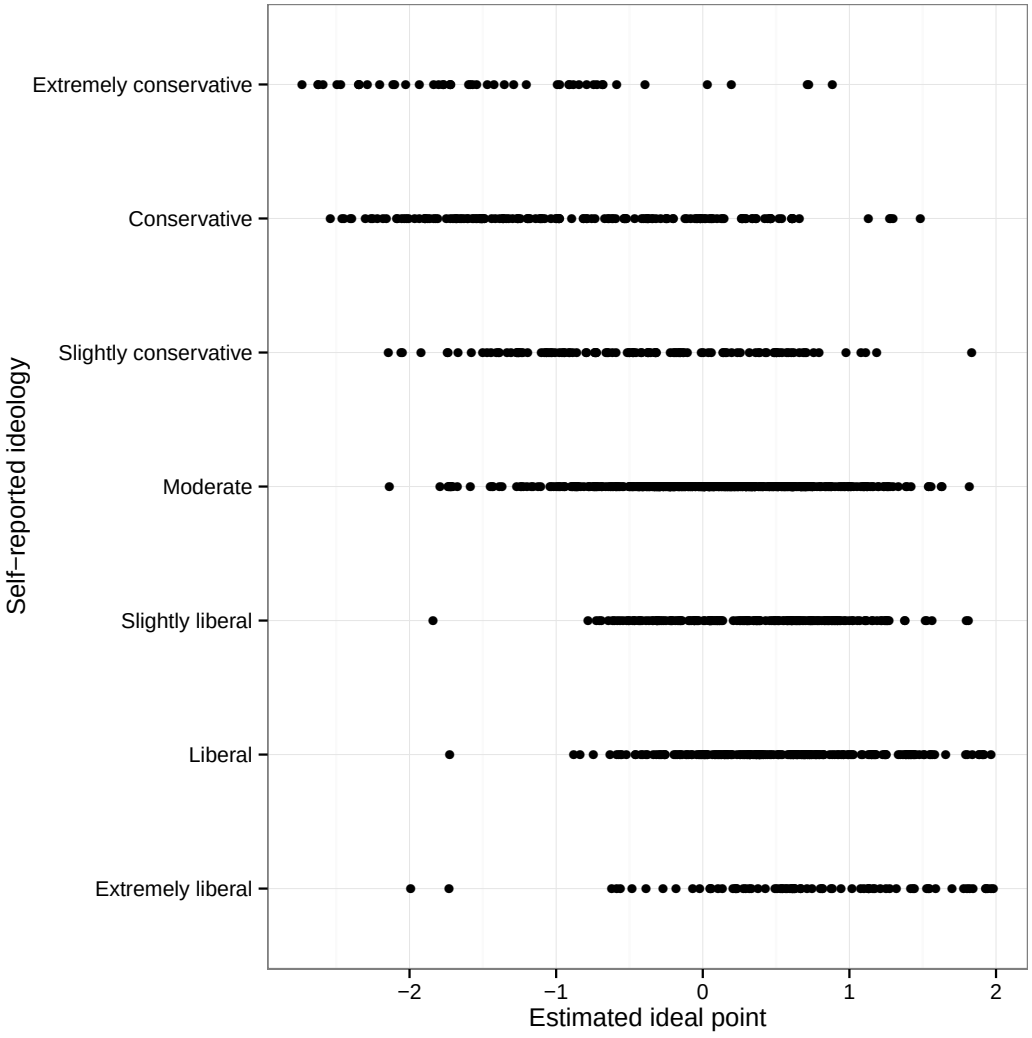
The following issue questions were used to estimate respondent ideology in the SSI data. Responses were fit to a one-dimensional item-response model using `MCMCpack` in `R` (Martin, Quinn and Park 2011).

- I support free trade and oppose special taxes on the import of non-American-made goods.
- There should be strong restrictions on the purchase and possession of guns.
- Implement a universal healthcare program to guarantee coverage to all Americans, regardless of income.
- Laws covering the sale of firearms should be made less strict than they are.
- The US should immediately act to destroy Iran?s nuclear weapons development facilities.
- Grant legal status to all illegal immigrants who have held jobs and paid taxes for at least 3 years, and not been convicted of any felony crimes.
- Increase taxes for those making over $250,000 per year
- Regulate greenhouse gas emissions by instituting a carbon tax or cap and trade system.
- Allow doctors to prescribe marijuana to patients.
- Require minors to obtain parental consent to receive an abortion.

- The government should provide parents with vouchers to send their children to any school they choose, be it private, public, or religious.
- Same-sex couples should be allowed to marry.
- Legalize the purchase and possession of small amounts of marijuana.
- The US should contribute more funding and troops to UN peacekeeping missions.
- The government should not provide any funding to the arts.
- Allow illegal immigrants brought to the US as children to apply for citizenship.
- Give preference to racial minorities in employment and college admissions in order to correct for past discrimination.
- Let employers and insurers refuse to cover birth control and other health services that violate their religious beliefs.
- Allow more offshore oil drilling.
- By law, abortion should never be permitted.
- I support the death penalty in my state.
- Government spending can stimulate economic growth.
- The federal government should subsidize student loans for low income students.
- The minimum wage employers must pay their workers should be increased.
- The federal government should try to reduce the income differences between rich and poor Americans.
- The federal government should do more about protecting the environment and natural resources.

To validate the IRT-based ideology measure, I plot it against the respondents' seven-point self-reported ideology in Fig. C.1.

Figure C.1: Respondents' self-reported ideologies and ideologies estimated from the issue questions battery.



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